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Analysis**

## **HEALTH PROFESSIONS OFFICER SPECIAL PAY STUDY**

**AUGUST 2014**



**CENTER FOR ARMY ANALYSIS  
6001 GOETHALS ROAD  
FORT BELVOIR, VA 22060-5230**

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| <b>14. ABSTRACT</b><br>As a force management tool, Health Professions Officer (HPO) Special Pay (HPOSP) influences Soldiers' career decisions. Although the Office of the Surgeon General (OTSG) manages the Planning, Programming, Budgeting, and Execution (PPBE) process for HPOSP, several stakeholders across the Headquarters, Department of the Army and Office of the Secretary of Defense also have authority over steps in the PPBE process. Late in the fiscal year of HPOSP execution, obligated funds may exceed available allocated funds both because disbursement errors compound through the year and because stakeholders did not come to consensus earlier in the programming process. The study team recommended three improvements to the PPBE process: incorporating measurable force sustainment into the programming process, formalizing a lag between HPO contract submission and execution (to identify obligated HPOSP earlier), and resolving HPOSP disbursements against the spend plan each month. The study team provided a tool in Microsoft Excel to support HPOSP Programming by measuring HPO force sustainment health and suggesting sustainment impact of each type of HPOSP. |                                    |                                     |  |  |  |
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## HEALTH PROFESSIONS OFFICER SPECIAL PAY STUDY

### SUMMARY

**THE PROJECT PURPOSE** was initially to conduct a systems review from end-to-end of the Planning, Programming, Budgeting, and Execution (PPBE) process to reduce conflict among stakeholders during execution of Health Professions Officer Special Pay (HPOSP); after an interim review, the project purpose was to explore feasibility of incorporating measurable force sustainment risk into HPOSP planning and programming.

**THE PROJECT SPONSOR** was the Office of the Surgeon General (OTSG), Special Pay Branch (Mr. Craig Buss).

**THE PROJECT OBJECTIVES** were to:

- (1) Understand the “as-is” PPBE process for HPOSP.
- (2) Identify sources of conflict in the process.
- (3) Develop recommendations to improve the process.

**THE SCOPE OF THE PROJECT** was to review the entire PPBE process for HPOSP and to recommend changes the Army could independently implement.

**THE PRINCIPAL FINDINGS** are:

- (1) The process goes into execution without stakeholder consensus.
- (2) Disbursement errors compound through the year.

**THE PRINCIPAL RECOMMENDATIONS** are:

- (1) Stakeholders incorporate measurable force sustainment risk into HPOSP planning and programming.
- (2) OTSG and G-1 draft policy change to establish an intentional lag between contract signature and bonus execution.
- (3) CAA develops an automated tool to resolve payments by recipient, HPOSP type, and amount.

**THE DECISION TOOL ACTIVITIES** include:

- (1) Visualizing HPOSP context for areas of concentration (AOCs).
- (2) Identifying Career Zones primarily impacted by HPOSP.
- (3) Measuring Sustainment Health for AOCs.
- (4) Exporting sustainment analysis for HPOSP eligibility discussions.
- (5) Recommending initial Sustainment Impact categories for all HPOSP.

**THE PROJECT EFFORT** was conducted by Ms. Valentin Swegle, Ms. Lisa Hamp, Mr. Abram Gross, and Ms. Nancy Zoller.

**COMMENTS AND QUESTIONS** may be sent to the Director, Center for Army Analysis, ATTN: CSCA-RA, 6001 Goethals Road, Suite 102, Fort Belvoir, VA 22060-5230.

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# 1 INTRODUCTION

## 1.1 Health Professions Officer (HPO) Special Pay (HPOSP)

In addition to basic pay, some HPOs are eligible for HPOSP. Total compensation influences the career decisions of HPOs. Four types of HPOSP affect the inventory in size and quality, as specified in Table 1.

| HPO Special Pay  | Inventory Effect                   |
|--|------------------------------------|
| <b>Incentive Pay:</b> Additional pay for designated specialties; professional skill recognition.   | Increase inflow and reduce outflow |
| <b>Accession Bonus:</b> One-time bonus for an initial Active Duty Service Obligation (ADSO).   | Increase inflow                    |
| <b>Retention Bonus:</b> Multi-year contractual pay for additional ADSO (Must-pay obligation extends several years). In general, compared to the annual bonus for a 4-year contract, the 3-year contract receives only 75% of annual value, and a 2-year contract receives 50% of annual value. | Reduce outflow                     |
| <b>Board Certification Pay:</b> Additional pay for professional certification from a board recognized by Assistant Secretary of Defense for Health Affairs (ASD(HA)).  | Increase professional competence   |

**Table 1. HPOSP Definition and Inventory Effect.**

Soldiers typically sign contracts to receive HPOSP annually upon the anniversary of their skills qualification or the initiation of military service. The per capita annual amount of HPOSP varies between \$5,000 and \$60,000 (intended to support comparable compensation for the same skill in private-sector career paths). Because qualification and commissioning typically occur in July and October, respectively, HPOSP budget obligations have three nearly equal proportions: July, October, and the remaining 10 months of the year. Some uncertainty always exists as to the number of Soldiers who will become eligible and sign contracts for HPOSP in a given timeframe. Additionally, HPOSP disbursement may occur up to 90 days after the contractual obligation date, which may extend obligations from July and onward into the next fiscal year.

## 1.2 HPOSP Requirement

Each year, ASD(HA) publishes a Department of Defense instruction (DoDI) with *unchangeable* HPOSP rates. Chaired by ASD(HA), the annual Health Professions Working Group establishes common HPOSP rates to reduce competition for HPOs among the Department of Defense (DoD), Coast Guard, and the U.S. Public Health Service. The DoD Special Pay program has increased both HPOSP received per capita and overall HPO eligibility to support expansion of wartime medical capability since 2001.

After ASD(HA) establishes HPOSP availability and unchangeable rates, each Service implements eligibility according to its needs by inventory criteria (e.g., subspecialties, contract length, etc.). Each Service may offer or decline HPOSP only for specified skills at the unmodified rate. A Soldier's area of concentration (AOC) defines his or her HPO skill. Some, all, or none of the 4 types of HPOSP may be offered to the 96 AOCs across 6 Corps: Medical

Corps (MC), Dental Corps (DC), Nurse Corps (AN), Medical Service (MS), Army Medical Specialist (SP), and Veterinary Corps (VC).

The total obligation for all HPOSP contracts is the requirement. The DoD sets potential HPOSP eligibility by HPO skills, and each Service or Agency determines whether to extend or not extend eligibility to its HPOs. Soldiers in eligible AOCs sign contracts at pay rates published in the DoDI, which pay annually and may extend for several years. To reduce the program cost of the HPOSP requirement, the Army may not change the rate and is unlikely to consider HPOSP as a primary motivation to separate Soldiers: examination of HPOSP eligibility for each AOC provides the sole lever to adjust the overall requirement.

$$\text{Requirement} = \sum_i^{\text{eligibility}} \text{Soldiers}_i \cdot \text{rate}_i$$

#### **Equation 1. Total HPOSP Requirement.**

The Special Pay Branch of the Office of the Surgeon General (OTSG) manages the Planning, Programming, Budgeting, and Execution (PPBE) process for HPOSP. During programming, stakeholders at OTSG and Headquarters, Department of the Army (HQDA), balance the sustainment needs of the 96 AOCs against the requirement—the program cost as shown in Equation 1—for all possible HPOSP. As part of the Pay and Allowances, Military Personnel Military Personnel, Army (PAMP MPA) budget, HPOSP falls under the Manning Program Evaluation Group (MMPEG) administered by G-1.

Minimal discretionary spending exists within the MPA appropriation. Congress establishes unchangeable military base pay rates. Base pay for Soldiers comprises nearly all of the MPA cost, severely limiting budget flexibility within MPA. HPOSP has a discretionary aspect only until signed HPO contracts (some of which extend over several years) become a must-pay obligation for the Army.

### **1.3 HPOSP Budget Environment**

In July 2012, the HPOSP disbursement significantly exceeded the spend plan expectation, leaving the PAMP MPA budget short near the close of Fiscal Year 2012 (FY12). If, at the end of the fiscal year, the obligation exceeds the authorized funds, the DoD must report the Antideficiency Act (ADA) violation through the President to Congress. In September 2012, the Director of the Army Budget convened a meeting to discuss the July disbursement spike, concerns about potential ADA violations, and options for a way ahead. Following the meeting, the group developed options for a systems analysis review. In January 2013, Dr. Steinrauf, G-1 Plans and Resources Director, contacted CAA to conduct analysis to support OTSG Special Pay Branch.

During the course of the study, stakeholder needs evolved and impacted the project purpose. In May 2013, G-8 indicated that the budget will drive HPOSP availability; previously, the HPO inventory drove the budget. In July 2013, HPOSP stakeholders from OTSG, G-1, and the Army Budget Office (ABO) received an interim update from the CAA study team, including the process flow and initial recommendations. With minimal budgetary flexibility in the PAMP MPA account and significant budget constraints, G-8 expressed interest in the discretionary aspects of HPOSP and signaled a potential audit. In August 2013, OTSG directed the CAA study

team to pursue a recommendation to develop a software tool in support of HPOSP programming decisions.

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## 2 STUDY DESCRIPTION

### 2.1 Problem, Purpose, Objectives, and Scope

In September 2012, significant conflict existed between HPOSP stakeholders in the execution process. During the execution year, the spend plan establishes the expectation for funds disbursement. In FY12, disbursement varied significantly enough from the spend plan to raise the specter of an ADA violation. As identified by execution process stakeholders, the problem was that the OTSG Special Pay Branch was having difficulty managing the spend plan for HPOSP.

The purpose of the study evolved as the HPOSP budget environment evolved and as stakeholder discussion transitioned from the PPBE problem space to the recommended solution space. At study initiation, the purpose was to conduct an end-to-end systems review of the HPOSP PPBE process to reduce conflict among stakeholders during execution. Following the sponsor-requested interim update in July 2013, the purpose transitioned to support implementation of study Recommendation 1 (Incorporate measurable force sustainment risk into HPOSP planning and programming). In line with sponsor guidance, the study only pursues one recommendation, discussed in Chapter 6.

Study objectives followed the problem (stakeholder conflict) and initial purpose (process recommendations):

1. Understand the “as-is” PPBE process for HPOSP.
2. Identify sources of conflict in the process.
3. Develop recommendations to improve the process.

The study scope must be broad enough to identify the underlying causes of stakeholder conflict in HPOSP execution but narrow enough to produce meaningful recommendations. The scope includes the end-to-end PPBE process for HPOSP. The scope includes non-Army organizations in describing the PPBE process, but the study only pursues recommendations that fall under control of Army stakeholders.

### 2.2 Essential Elements of Analysis (EEAs)

The study objectives establish the structure for the EEAs:

1. What is the “as-is” PPBE process for HPOSP?
  - 1.a. Which organizations are involved in the PPBE process for HPOSP, and what is their level of involvement? *Section 3.1*
  - 1.b. What is the product at each process step? *Section 3.2*
2. How do inconsistencies arise in funding expectations between organizations?
  - 2.a. What are the primary process conflicts each organization experiences? *Section 3.4*
  - 2.b. Where in the PPBE process do these conflicts occur? What are the larger issues driving conflicts in the PPBE process? *Section 4.1 and Section 5.1*

2.c. How does an organization's priorities affect their process role? How does each organization quantify the success of their role? *Section 4.2 and Section 5.2*

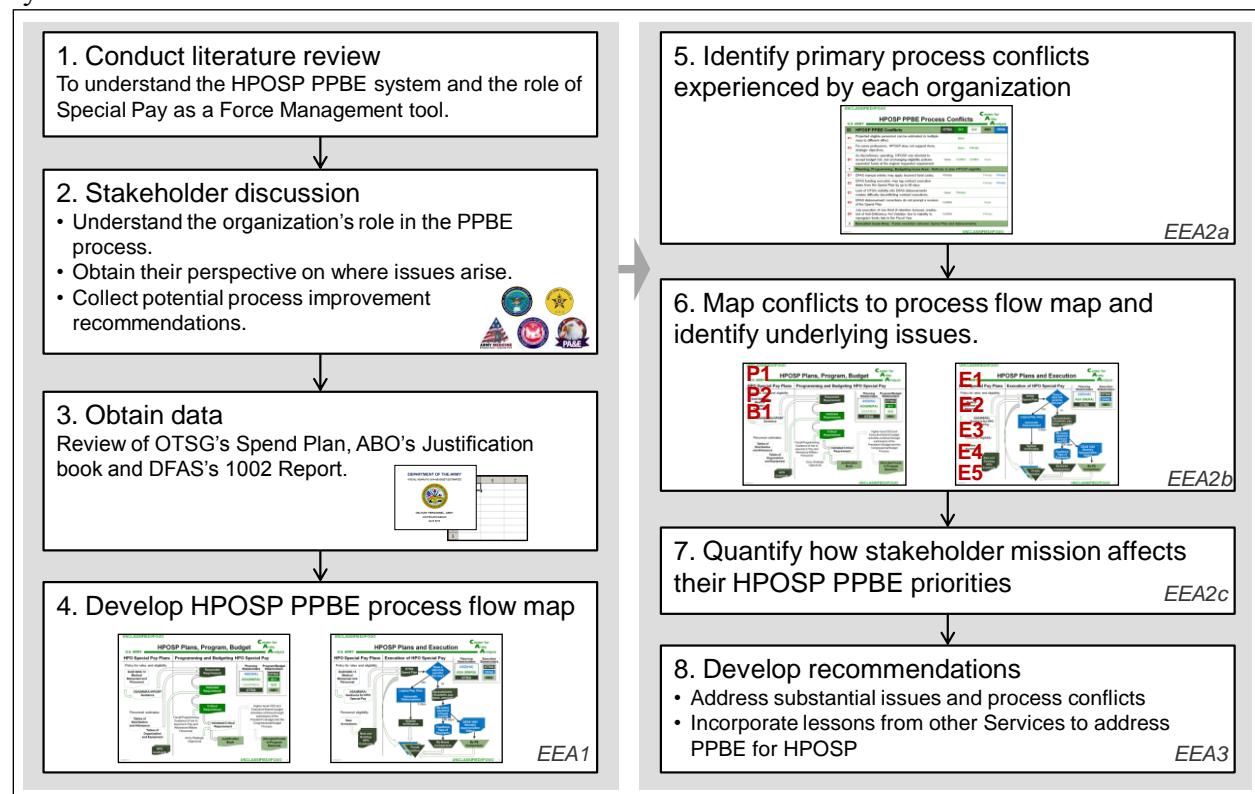
3. What are options to improve effectiveness of the PPBE process for HPOSP stakeholders?

3.a. How would the process changes be implemented? *Section 4.5 and Section 5.4*

3.b. What is the feasibility of implementation? *Chapter 6*

## 2.3 Study Methodology

To understand the root causes of stakeholder conflict, the study team used the EEAs to guide research (literature, interviews, and data), then consolidated stakeholder perspectives into the framework of the HPOSP PPBE process flow. Although OTSG manages the HPOSP PPBE process, other stakeholders had authority through most process steps and did not thoroughly understand other stakeholders' roles. A comprehensive system overview provided the foundation for each stakeholder to recognize differences between the as-is and expected PPBE system.



**Figure 1. Study Methodology.**

The study methodology shown in Figure 1 supported the initial purpose of the study: to conduct an end-to-end systems review of the HPOSP PPBE process to reduce conflict among stakeholders during execution. However, as the focus transitioned from the problem space to the solution space (as indicated in EEAs 3.a. and 3.b.), the study team developed a software tool by transitioning to a methodology more specific to systems engineering (Section 6.1).

## 2.4 Study Sources

Stakeholder interviews formed the basis to map the PPBE process and identify conflicts. Because the process flow documentation did not exist prior to the study, direct discussion with subject matter experts was critical to gain and verify comprehensive system understanding (APPENDIX C). Where process expectations diverged between stakeholders, the study team requested amplifying data and/or documentation and resolved process steps.

### Office of the Surgeon General

- Special Pay Branch (Sponsor), Mr. Craig Buss
- Human Resources Force Management Branch, Mr. Chris Christopher
- *The Army Medical Department (AMEDD) Special Pay*. Web; AMEDD Special Pay Branch, 2013.
- HPOSP Data/Documentation: Various programming materials since 2005, requirements development spreadsheets since 2009, various policy documents, and executive summaries from meetings triggering the study

### Headquarters, Department of the Army, G-1

- MMPEG Program Analyst, LTC Stephen Gauthier

### Headquarters, Department of the Army, G-8

- Program Analysis and Evaluation (PA&E), LTC Michael Kolb
- HPOSP Data/Documentation: PA&E internal white papers for advocacy and counterpoint, and OTSG requirements briefing

### Assistant Secretary of the Army, Financial Management and Comptroller (ASA(FM&C)), Army Budget Office (ABO)

- Military Personnel, Army, Mr. Michael Fulton, Ms. Valerie Alexander, Ms. Althea Duncan
- *Fiscal Year 2014 Budget Estimates: Military Personnel, Army, Justification Book*. Pentagon, DC: United States Army, 2013.
- HPOSP Data/Documentation: 2013 Spend plan spreadsheet

### Defense Finance Accounting Service (DFAS)

- Accounts Maintenance Branch, Accountant Ms. Linda Waln
- HPOSP Data/Documentation: Army General Fund Accounting Report (AR(M)) 1002 Appropriation Status by FY Program and Subaccounts, Nov 2012.

### Headquarters, United States Air Force (USAF)

- Exception: Although the USAF is not an HPOSP stakeholder, the Air Force has consistently employed a single quantitative basis for Force Management programs across all career fields since 2004.

- Force Management and Enterprise Readiness Analysis Division, Lt Col Patrick White, Maj Mark Degenhart
- Medical Recruiting and Sustainment Division, Maj Kelly Lesnick
- HPOSP Data/Documentation: *2012 - 2013 Edition Career Field Manager's Guide*. Pentagon, VA; United States Air Force, 2012.

Literature provided the foundation to understand the role of HPOSP. Numerous studies exist to explore the complexity of force management, in particular the military's unique employment requirement: internal leadership development. As a force management tool, HPOSP supports the development of healthy capability for the Military Health System, and any process recommendations must carefully consider potential long-term impact on Army medical capability. More explicit discussion of force management considerations is provided in Section 4.4.

*Health Manpower Personnel Data System: Fiscal Year Statistics 2012*. Monterey, CA; Defense Manpower Data Center Office of the Assistant Secretary of Defense for Health Affairs, 2012.

- Comparison of HPO inventory across the DoD

Brannman, Shayne, Miller, Richard, Kimble, Theresa, Christensen, Eric. *Health Professions' Retention-Accession Incentives Study Report to Congress (Phases II & III: Adequacy of Special Pays and Bonuses for Medical Officers and Selected Other Health Care Professionals)*. Alexandria, VA; Center for Naval Analyses, 2002.

- Comparison of per capita HPOSP across AOCs

Galway, Lionel A., Buddin, Richard J., Thirtle, Michael R., Ellis, Peter S.H., Mele, Judith D. *Understrength Air Force Officer Career Fields: A Force Management Approach*. Santa Monica, CA; RAND Corporation, 2005.

- Discussion of long-term force management planning and impact

## 3 AS-IS PPBE PROCESS

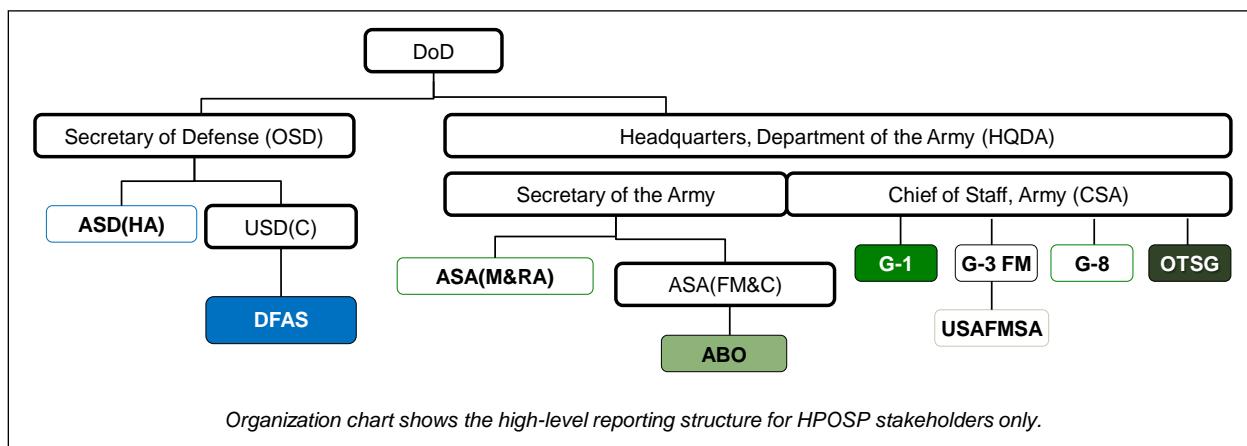
### 3.1 Stakeholders

Stakeholders are defined as any office with responsibility for any resource used in the HPOSP PPBE process. The stakeholders who initiated the study were G-1, OTSG, and ABO. The study team mapped the stakeholders to the PPBE process to address EEA 1.a: Which organizations are involved in the PPBE process for HPOSP, and what is their level of involvement?

| Stakeholder  | Acronym   | Plan | Program/<br>Budget | Execute |
|--|-----------|------|--------------------|---------|
| Office of the Surgeon General                                    | OTSG      | ×    | ×                  | ×       |
| Office of the Deputy Chief of Staff, Army, G-1                   | G-1       | ×    | ×                  | ×       |
| Army Budget Office   | ABO       |      | ×                  | ×       |
| Defense Finance Accounting Service                               | DFAS      |      |                    | ×       |
| Assistant Secretary of Defense for Health Affairs                | ASD(HA)   | ×    |                    |         |
| Assistant Secretary of the Army for Manpower and Reserve Affairs | ASA(M&RA) | ×    | ×                  |         |
| Office of the Deputy Chief of Staff, Army, G-8                   | G-8       |      | ×                  |         |
| U.S. Army Force Management Support Agency                        | USAFMSA   | ×    |                    |         |

**Table 2. HPOSP PPBE Stakeholders.**

The study problem and scope guided our interaction with HPOSP PPBE stakeholders. In particular, the problem arose due to conflicts during execution (indicated by color blocks in Table 2). The scope also limited recommendations to the authority of the Army (indicated by green in Table 2).



**Figure 2. Reporting Chains of HPOSP Stakeholders.**

The organizational alignment of the HPOSP stakeholders provides context to discuss priorities and perspective. Particularly due to the diversity of the reporting chains (as seen in Figure 2),

the existing process could progress without meeting stakeholder needs and expectations. The value of any recommendation lies in improved ability to address each affected organization's priorities and process roles.

### 3.2 Plans, Program, and Budget

Although the HPOSP stakeholders identified a problem during execution, earlier processes create the expectation of how much funding will be executed. An ADA violation occurs when the allocated funds are insufficient to fulfill U.S. Government obligations during execution. (The next section details the process flow for execution.) The allocated funds result from planning, programming, and budgeting for the expected HPOSP requirement. HPOSP requirement development begins nearly 2 years prior to execution based on plans: HPOSP eligibility policies, the number of expected eligible Soldiers, and the unchangeable rates established by DoDI (described in Equation 1).

HPOSP planning includes both policy and personnel estimates. (Plans used for programming are depicted on the left in Figure 3.)

- Policy: ASD(HA) sets policy for available HPOSP rates and eligibility; ASA(M&RA) implements HPOSP policy by choosing to decline or offer each type of DoDI-established HPOSP. The Army policy for HPOSP is authoritative but also derivative of DoD policy.
- Personnel: Future personnel estimates may be based on authorizations (spaces) or inventory (faces). The needs of the Army are defined by USAFMSA as HPO authorizations in Tables of Organization and Equipment and Tables of Distribution and Allowance. OTSG also tracks the HPO inventory and historical HPOSP acceptance (HPO contracts) within the Medical Operational Data System (MODS). Both personnel estimates will be subject to change by execution: authorizations, accession, and attrition may all rise or fall.

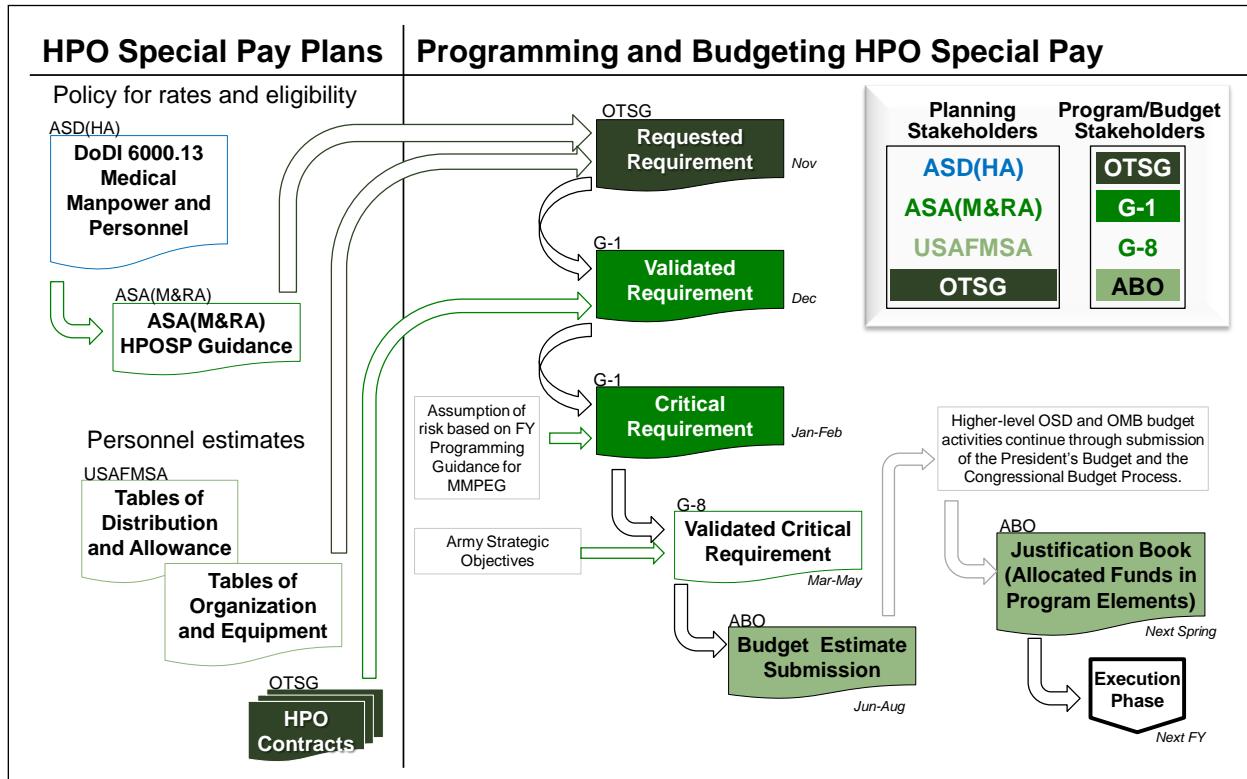
In HPOSP programming, stakeholders sequentially refine the HPOSP requirement to balance sustainment objectives and cost (programming and budgeting are depicted on the right in Figure 3.)

1. OTSG: The requested requirement incorporates an estimate of eligible Soldiers with ASD(HA)-published rates for each type of HPOSP. OTSG requests HPOSP to manage the inventory of HPOs.
2. G-1: The validated requirement may use different estimations of eligible Soldiers to produce a different requirement. G-1 validates the inventory management role (eligibility) of HPOSP and the estimated program size (Soldiers).
3. G-1: The critical requirement incorporates budgetary risk as directed by the Army to reduce the size of the requirement. G-1 identifies the mission-critical or mission-essential eligibility to absorb cuts in low-impact areas.
4. G-8: The validated critical requirement adjusts the HPOSP requirement within the MMPEG to best meet the needs of the Army. G-8 validates the balance of sustainment and risk.

After the validated critical requirement, the Army Budget Office engages in the budgeting process. The Army and other Services complete the budget estimate submission of necessary program funds. The Office of Management and Budget compiles the President's Budget for

submission to Congress. The Congressional Budget Process results in a bill the following year, in which each line item corresponds to an allocated amount as a Program Element (PE). ABO completes the budgeting process with publication of the Justification Book months before the start of the execution year, identifying the allocated amount for each PE.

The study team employed event-trace descriptions to identify resource flow between stakeholders. This method clarified process steps by identifying products and responsibilities, addressing EEA 1.b. What is the product at each process step? (Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 8501.01B Enclosure B, Joint Participation in DoD PPBE, also depicts the overall PPBE process as a document flow.)



**Figure 3. Planning, Programming, and Budgeting Process.**

In reviewing the development of allocated HPOSP funds for the requirement, the only flexibility appears in planning (policy), and the primary stakeholder interaction occurs during programming. As shown in Equation 1, the Army can only reduce the HPOSP requirement by altering HPOSP eligibility published by ASA(M&RA): Soldiers won't be separated to reduce the program cost, and ASD(HA) sets unchangeable HPOSP rates. During programming, sequential stakeholder involvement may result in a Budget Estimate Submission significantly distant from the Army's plans for HPOSP eligibility and personnel estimates.

### 3.3 Plans and Execution

During the execution year for HPOSP, the government disburses allocated funds against contractually obligated HPOSP. The contractual obligation is the result of planning. Allocated funds are a result of the planning, programming, and budgeting processes described in the

previous section, although plans (policies and personnel inventory) may have changed in the nearly 2-year process.

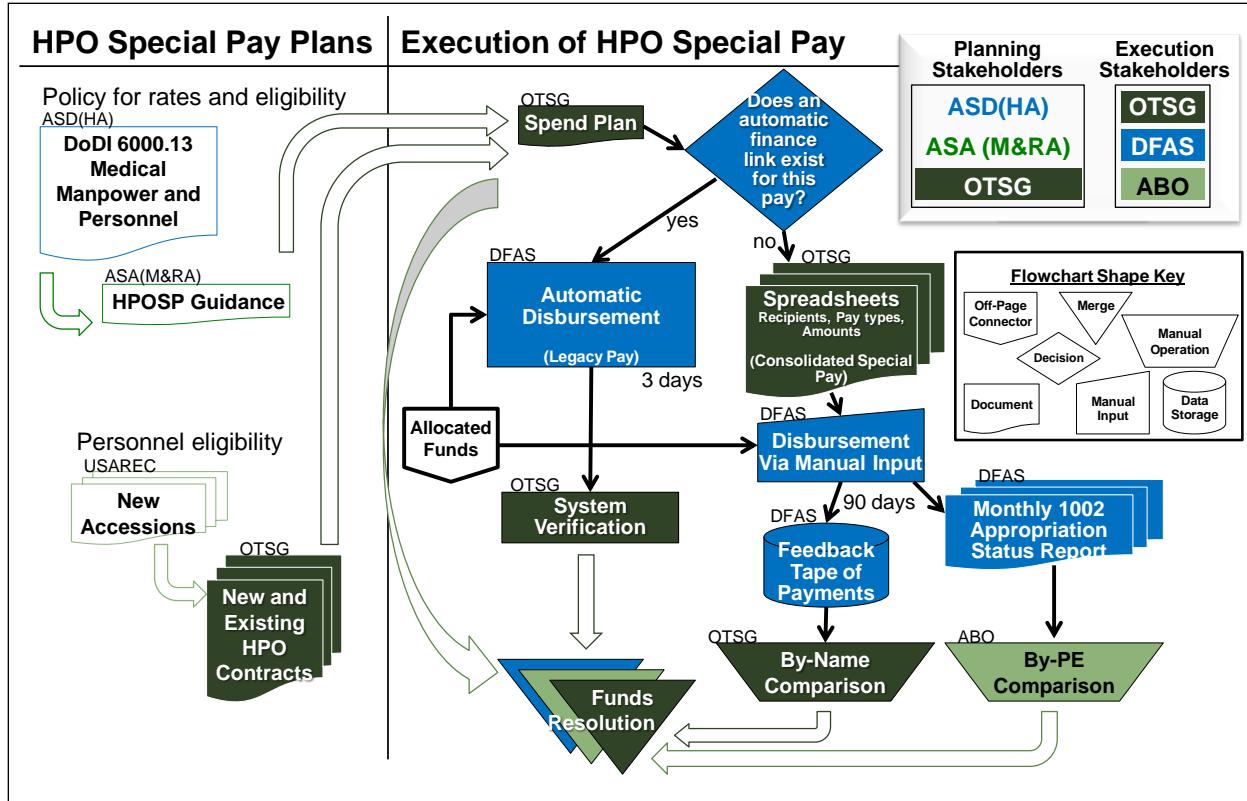
Planning during the execution year results in a spend plan based upon actual policies and HPOSP contracts, rather than projections and estimates. (Execution-year plans are depicted at left in Figure 4.)

- Policy: The published ASA(M&RA) rates and eligibility define the cost and availability for new HPOSP contracts.
- Personnel: Signed HPOSP contracts obligate the Army for non-discretionary funding. Some Soldiers continue to be obligated under previously signed multi-year contracts, such as retention bonuses. New HPO accessions and HPO Soldiers eligible for contract renewal sign new contracts through the year.

During the execution process, OTSG and ABO use the spend plan as a guide to compare DFAS disbursement (as Soldier pay) and reporting of allocated HPOSP funds. Allocated funds are the result of the budgeting process described in the previous section. (Execution is depicted at right in Figure 4.)

- Spend plan: OTSG develops a by-month spend plan identifying the expected HPOSP obligation for each type of HPOSP for each Corps for each month in the execution year. Because the spend plan is driven by the HPOSP obligation, the spend plan might not align with allocated funds. OTSG updates the spend plan monthly, based upon actual disbursements and new contracts.
- Disbursement: HPOSP may be disbursed automatically or manually. A planned conversion from a legacy HPOSP to a consolidated HPOSP has been ongoing for several years. As the system of record for pay disbursement changes from the Resource Management Tool (RMT) to General Fund Enterprise Business System (GFEBS), no new pay codes (Format Identifiers (FIDs)) may be added. Without in-system FIDs, manual disbursement for a consolidated HPOSP becomes the only option.
  - Automatic Disbursement: For HPOSP with FIDs, RMT connects directly to MODS. HPOSP disbursement occurs within 3 days of the contractually defined date on the Soldiers' contracts. DFAS provides system-to-system verification, which is reported in MODS.
  - Manual Disbursement: Each month and for all consolidated HPOSP, OTSG provides a spreadsheet list of Soldiers, HPOSP types, and pay amounts to DFAS. By 2015, all accession, incentive, and retention HPOSP will be consolidated HPOSP, necessitating *tens of thousands* of payments manually entered each year until GFEBS is able to automatically disburse HPOSP.
- Funds Comparison: At the conclusion of each month, DFAS makes a record of payments available and reports disbursed funds by PE.
  - Record of Payments: OTSG reviews the limited detail available for automatic payment through MODS and as necessary, reviews the tape of all DFAS payments to identify HPOs who received contractually obligated HPOSP.

- Report: ABO reviews the disbursed funds against the spend plan. The disbursed funds for the month do not exactly align with the spend plan: manual input may lag by up to 90 days, some HPOSP may be paid the incorrect number of times (including zero), incorrect accounts may be selected for payment, and incorrect amounts may be entered.



**Figure 4. Plans and Execution Process.**

In reviewing the execution process for HPOSP, three paths are clearly visible in Figure 4: automatic disbursement and verification; manual disbursement and by-name verification; and manual disbursement and by-PE verification.

- Automatic Disbursement (DFAS) and in-System Verification (OTSG): This process is the fastest (3 days), subject to the least error, and requires no intervention. However, automatic processing requires system updates which are not allowed in the planned obsolescence of RMT.
- Manual Disbursement (DFAS) and by-Name Verification (OTSG): Processing a payment takes up to 90 days, requiring a manual check of the month's disbursements against the thousands of HPOSP obligations scheduled in the previous few months. This is the most accurate resolution but also the most time-consuming.
- Manual Disbursement (DFAS) and by-PE Verification (ABO): Deviation at PE from the spend plan may be due to lag in payment (requiring no correction) or an error in one or more payments (which requires identification and correction).

The execution process is complicated by whether automatic finance links exist for the HPOSP. Besides the inefficiency and error created by manual HPOSP disbursement, correction (verification) is also difficult. Due to finance system limitations, the execution process is overly complex.

### 3.4 Process Conflicts and Issues

Through the course of stakeholder interviews, the study team asked stakeholders to identify conflicts in the HPOSP PPBE system. By consolidating stakeholder conflicts, the study team addressed EEA 2.a. What are the primary process conflicts each organization experiences? After speaking to all stakeholders, the study team consolidated the list of conflicts and confirmed the rephrasing was in line with the intentions of the original interviews. Further detail is available in APPENDIX C.

| ID  | HPOSP PPBE Conflicts   | OTSG | G-1 | G-8 | ABO | DFAS |
|---|--|------|-----|-----|-----|------|
| P1  | Projected eligible personnel can be estimated in multiple ways to different effect.  |      | X   |     |     |      |
| P2  | For some professions, HPOSP does not support needs of the Army.  |      | X   | X   |     |      |
| B1  | As discretionary spending, HPOSP was directed to accept budget risk, but unchanging eligibility policies expended funds at the original requested requirement. | X    | C   | C   | X   |      |
| <b>Issue1 Planning, Programming, Budgeting Issue Area:</b> Process goes to execution without consensus. |  |      |     |     |     |      |
| E1  | DFAS manual entries may apply incorrect fund codes.  | X    |     | X   | X   |      |
| E2  | DFAS funding execution may lag contract execution dates from the spend plan by up to 90 days.  |      |     | X   | X   |      |
| E3  | Lack of OTSG visibility into DFAS disbursements creates difficulty deconflicting contract executions.  | X    | X   |     |     |      |
| E4  | DFAS disbursement corrections do not prompt a revision of the spend plan.  | C    |     |     | X   |      |
| E5  | July execution of one-third of HPOSP creates risk of Anti-Deficiency Act Violation due to inability to reprogram funds late in the Fiscal Year.                | C    |     |     | X   |      |
| <b>Issue2 Execution Issue Area:</b> Disbursement errors compound through the year.                      |  |      |     |     |     |      |

**Table 3. Process Conflicts Identified in Stakeholder Interviews.**

Table 3 summarizes stakeholder-identified process conflicts with three types of emphasis:

- X** Voiced conflict as high priority
- ✗** Voiced conflict
- C** Confirmed conflict after CAA-initiated discussion

ADA violations occur when the executed funds exceed allocated funds (prior to execution). The study team grouped conflicts into overarching issues prior to execution and during execution. Stakeholder consensus conflicts (developing allocated funds prior to execution) and HPOSP disbursement conflicts (during execution) will be addressed separately in the next chapters.

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## 4 STAKEHOLDER CONSENSUS CONFLICTS

### 4.1 Consensus Conflicts

Conflict will always arise during the programming process. Stakeholder missions differ (as described in the next section) and must be balanced to develop the HPOSP program. Some conflicts are desirable (e.g., validation), but some conflicts lead to inaccuracies or inefficiencies, which may result in misalignment of allocated funds and obligations during execution. (Conflicts are depicted within the process flow in Figure 5.)

**P1.** Projected eligible personnel can be estimated in multiple ways to different effect.

- Desirable Conflict: To produce the validated requirement, G-1 uses different analysis methods or assumptions (discussed in Section 3.2) to validate OTSG's requested requirement.
- Possible Inefficiency: OTSG analyzes but does not share year group information for AOCs, which would provide richer insights to accession and retention problems specifically targeted by HPOSP.

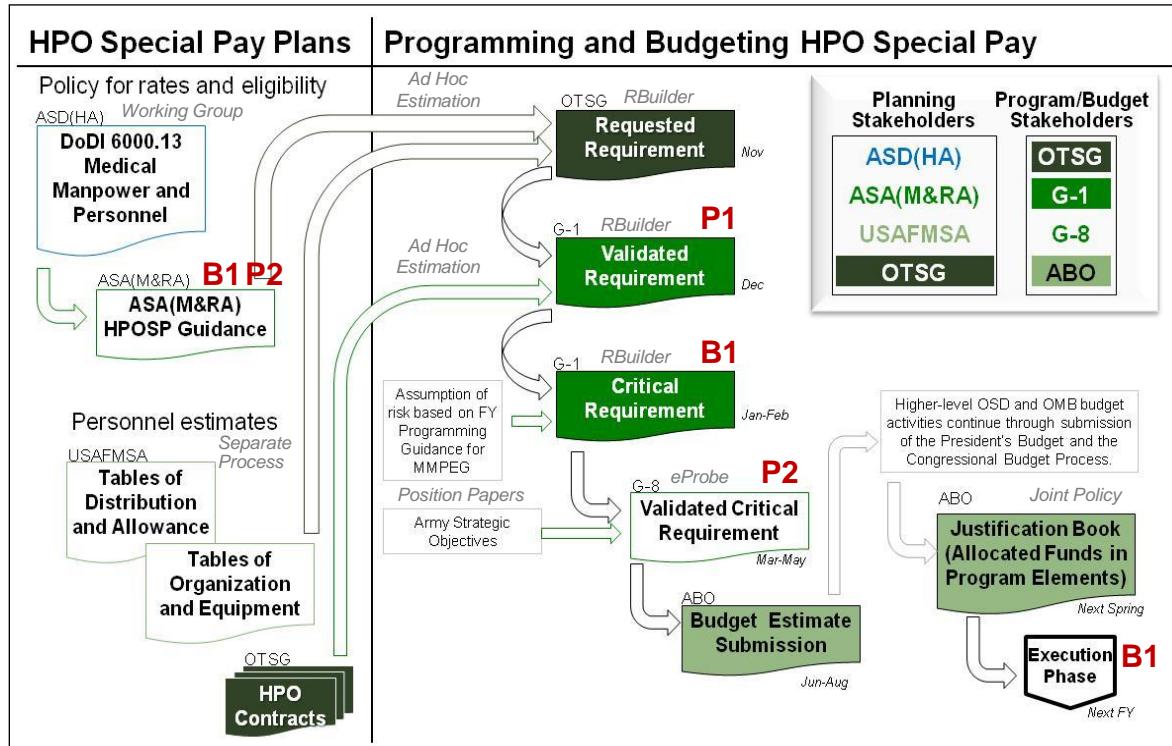
**P2.** For some professions, HPOSP does not support needs of the Army.

- Desirable Conflict: G-8 must ensure maximum impact of the HPOSP program while balancing available PAMP MPA funds across all Army manning needs. In some cases, less funding will be available than stakeholders request, which results in assuming risk.
- Possible Inaccuracy: OTSG Human Resources Force Management initially applies but does not share force sustainment analysis, which results in different perceptions of the need for HPOSP to manage AOC inventories.
- Possible Inefficiency: Because OTSG's force sustainment analysis does not explicitly drive the requested requirement, other stakeholders apply rudimentary and inconsistent force management analysis. Significant effort is spent by all stakeholders both constructing and refuting analysis methods that change by AOC and each programming cycle.

**B1.** As discretionary spending, HPOSP was directed to accept budget risk, but unchanging eligibility policies expended funds at the original requested requirement.

- Desirable Conflict: G-8 must ensure maximum impact of the HPOSP program while balancing available PAMP MPA funds across all Army manning needs. In some cases, less funding will be available than stakeholders request.
- Possible Inaccuracy: The HPOSP Program executes on the existing policy, not the allocated funds. During initial interviews, G-8 was unaware that HPOSP rates are unchangeable. Unless ASA(M&RA) changes policy, the program will not be resized. G-1 and G-8 programming decisions to limit funds were not implemented as policy changes by Execution.
- Possible Inefficiency: If policy is unchanged, HPOSP executes close to the requested requirement. All efforts by subsequent stakeholders have no impact. Historically, HPO

contracts and the requested requirement by OTSG determined the entirety of HPOSP execution because ensuing requirements reductions did not correspond to policy change.



**Figure 5. Consensus Conflicts in Process Flow Chart.**

When mapped to the process flow in Figure 5, the conflicts arise during requirements development and policy before proceeding to execution. Viewing the conflicts in the context of resource flow helps us to address EEA 2.b. The process goes to execution without stakeholder consensus (Issue 1). To affect policy by execution year, the requirements process must build a common way ahead to meet stakeholder needs.

## 4.2 Quantifiable Stakeholder Priorities

Conflict arises because each stakeholder has a different mission. To reach stakeholder consensus, the requirements process must support the mission priorities of each. Any recommended change to the existing process must improve one or more stakeholder priorities, ideally without degrading others.

| Stakeholder | HPOSP Priorities   |
|-------------|--|
| <b>G-8</b>  | Programmed HPOSP funds to increase capability and/or reduce risk.  |
| <b>G-1</b>  | Alignment of HPO assigned and authorized strength.   |
| <b>OTSG</b> | <p>Force sustainment sufficiency.</p> <ul style="list-style-type: none"> <li>Assigned personnel sufficient to meet needs of military treatment facilities (including minimum personnel to meet facility medical certifications) and to support operations.</li> <li>Accessions to initiate careers in a closed system: Planning for the year-group contribution to sustain the AOC for 30 years.</li> <li>Manning to support force development needs additional to authorizations: initial qualification, mid-career specialty certifications, and cross-flow into related duty opportunities.</li> <li>Incentivized benefits (pay and training) to retain experience and meet mid- and senior-grade manning objectives with quality comparable to civilian and other public service careers.</li> </ul> |
| <b>ABO</b>  | Programmed HPOSP funds sufficient for execution.   |

**Table 4. Programming/Budgeting Stakeholder Priorities.**

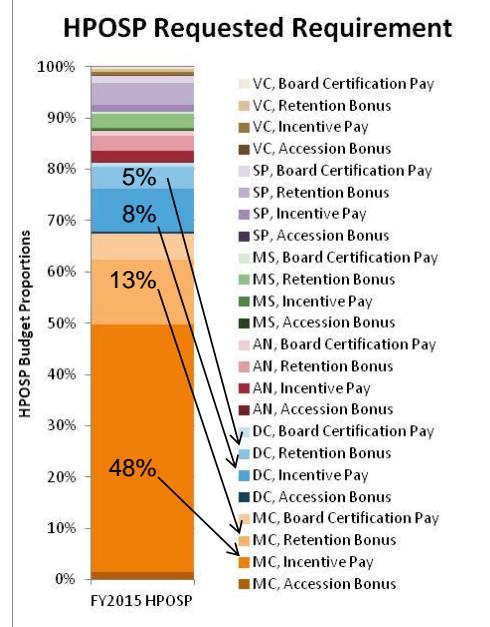
The diversity of HPOSP priorities, as seen in Table 4, reveals the root of conflict P2: each stakeholder has different mission perspective on “needs of the Army.” As each stakeholder interprets the need for HPOSP, the significant force sustainment analysis accomplished by OTSG has not been integrated into stakeholder discussion. Adding to the complexity, force sustainment analysis must be considered across the 96 AOCs.

#### **4.3 Basis: Requirement Inflexibility**

To reduce the execution size of the HPOSP requirement, the stakeholders must change HPOSP eligibility, as shown in Equation 1, rather than adjusting the requirement without an eligibility change, as described in issue **B1**. Although a 5% reduction to the requirement may seem to be a simple request, few obvious options exist: only incentive pay and retention bonuses in the Medical Corps and Dental Corps comprise at least 5% of the HPOSP requirement, and cutting any of them in total is unwise. Additionally, some HPOSP contracts are multi-year contracts, and the pay is already obligated.

- The HPOSP program is non-trivial to resize because of HPOSP diversity and unmodifiable HPOSP rates.
- The Army has limited policy options to implement HPOSP for eligible AOCs within the 6 Corps.
  1. Decline to offer a type of HPOSP in its entirety.
  2. Limit commitment length of Retention Bonus\*: compared to annual value of a 4-year bonus, a 3-year bonus is 75% and 2-year is 50% each year.
  3. *Limit HPOSP within Specialties or Years of Service:* HPOSP has historically never been managed by Years of Service; legal permissibility has not been explored.
- To significantly decrease HPOSP execution, the Army must change HPOSP eligibility for multiple AOCs.

\$298M by Corps and Type of Pay



Program eligibility is managed within each Corps.

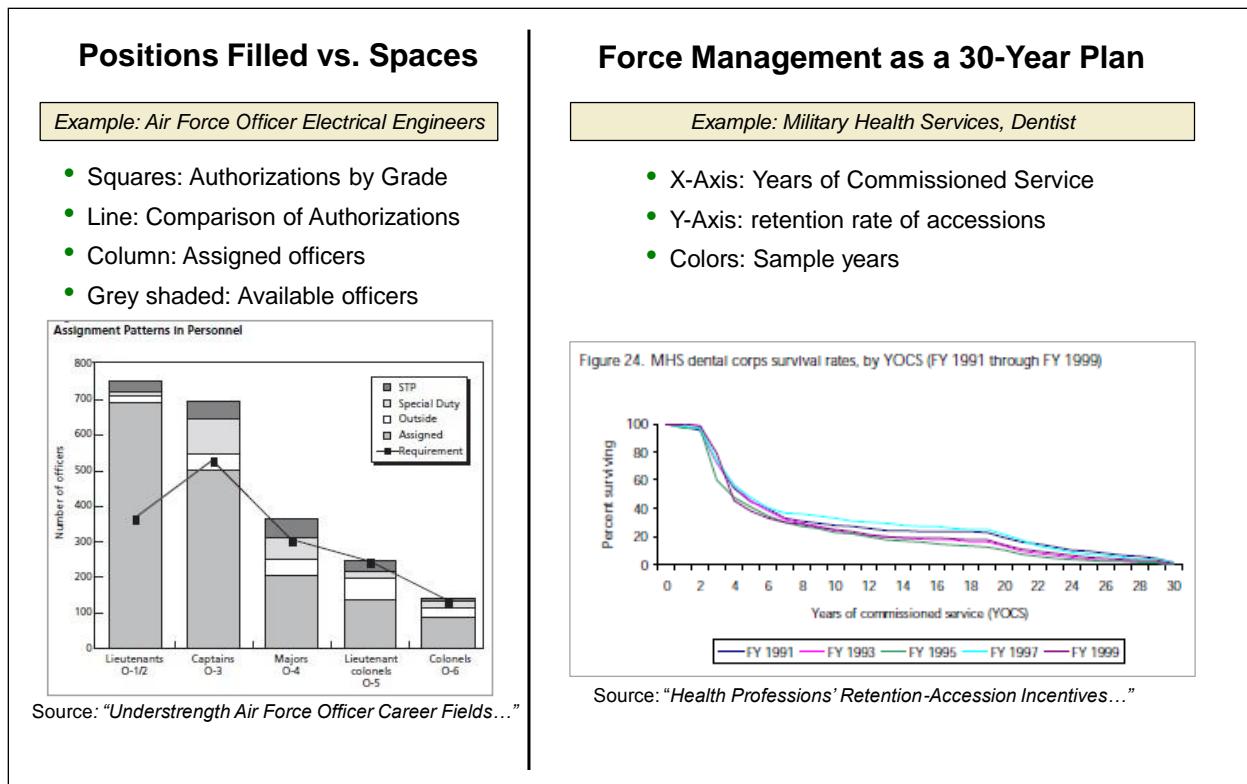
\*Multi-year obligation gives Retention Bonuses less same-year flexibility than other HPOSP.

**Figure 6. HPOSP Programming Decision Space.**

The HPOSP requirement can only be reduced by declining or limiting eligibility for each type of HPOSP and for each AOC. Requirement complexity includes 4 types of HPOSP (for different effect) and 96 potential AOCs (within 6 Corps). As depicted in Figure 6, reduction of the requested requirement by even 5% would necessitate considering the effects of eligibility changes for several AOCs because only HPOSP for four Corps comprise even 5% of the requirement. To balance HPOSP cost and impact, the requested HPOSP must be prioritized by already obligated cost and quantifiable force management value.

#### 4.4 Existing Force Management Research

Force sustainment has a long research history, which informs management decisions. Military force development must consider skill availability and development over a 30-year career. The Air Force has developed significant experience in applying a quantitative basis for force sustainment programs.



**Figure 7. Sustainment Planning for All Year Groups.**

Force sustainment is a 30-year problem. The Army accesses lieutenants and after 20 years, produces colonels. The benefits of an Army career include opportunities and compensation. To fill colonel billets, force sustainment efforts must offer sufficient benefits to retain Soldiers at predictable rates for up to 30 years.

The personnel inventory must be sufficient to accommodate more than the authorizations. In Figure 7 on the left, a chart depicts both authorizations (listed as “requirement” in this study, this is the only use of the term not referring to program cost) and inventory by rank.

- Authorizations: In the chart, authorizations for captains are higher than those for lieutenants, which is not achievable. Captains are a higher grade than lieutenants and have already exceeded their initial ADSO; some of the lieutenant population has departed. Each successive rise in rank corresponds to a smaller inventory. It may be the case that only higher ranks are qualified to provide needed capability, in which case, the AOC must be overmanned in lower ranks to retain the more senior capability.
- Inventory: The chart depicts categories of availability to fill authorizations, including assignments within the career field and the tax: Student-Transient-Prisoner/Patient (STP), Special Duty, and Outside.
  - STP: The Army equivalent of this Air Force term is Trainees, Transients, Holdees, and Students (TTHS). This category is especially large in HPOs, due to long-term skill development.
  - Special Duty: Some duties may be filled by any AOC but do not have their own inventory. For example, command positions are special duties. These force

development opportunities provide needed capability and sometimes-desirable experience within the career field. If participation in these duties is disincentivized (e.g., reduction in pay received), consideration should be given to the potential impact on the capability and senior-level AOC experience.

- Outside: Some opportunities or needs exist outside the AOC, such as an assignment in a different AOC. Some Soldiers may receive an assignment to a related AOC with an overlapping skill set, particularly if that skill is undermanned.
- Assigned: These assignments reflect the same AOC as authorized.
- Rank: Typically, lieutenants and colonels do not provide comparable capability. Comparison of total inventory against total authorizations both ignores the necessary “tax” on the AOC as defined, above, but it also masks rank-specific shortages and overages. In the case of the depicted chart, a manning overage is necessary because the authorization structure is poorly aligned with the natural career progression: lieutenants are overmanned and field grade officers are undermanned.

Most career fields have a natural progression, shaped by patterns in outflow (leaving the Army) and crossflow (changing to another AOC, such as acquiring a specialty). On the right side of Figure 7, the chart depicts survival curves for the Air Force Dental Corps, grouped by year of entry. Career progression has key moments:

- Conclusion of initial ADSO (drop at year 3),
- Decision whether to stay until retirement (steepest drop between year 3 and year 7), and
- Retirement eligibility (year 20).

AOCs are subject to more variation than Corps. Some HPOs access as “crossflow” from other AOCs in mid-career. Some AOCs use accession bonuses to access fully qualified personnel with creditable time, adding them further to the right than “year 0” as shown in the chart. Additionally, some HPOs have less consistency in their attrition patterns due to their highly marketable skills which can be transferred to another form of public service (e.g., inter-Service transfer) or are in high demand in the private sector (e.g., trauma surgeon).

Since 2004, the U.S. Air Force develops a 30-year model for each career field. An objective manning standard (OMS) provides the basis for sustainment-based force management analysis. The *2012 - 2013 Edition Career Field Manager's Guide* explains sustainment-based analysis in the context of force management:

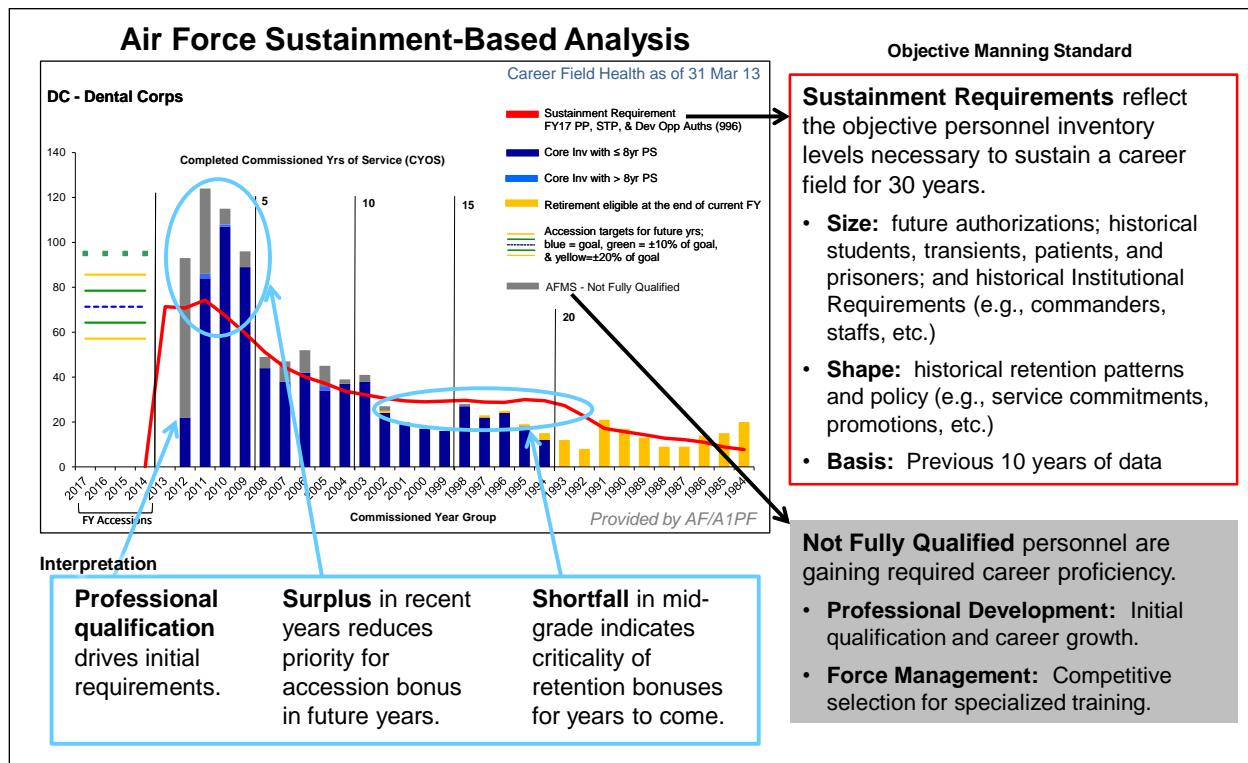
*“Historically, force management called for meeting end strength primarily by adjusting accessions to balance anticipated losses or retention. There were no sustainment lines to predict the impacts of these actions on the future force. As you can guess, the process produced annual fluctuations in recruiting goals that trended up and down over the [Fiscal Year Defense Program] and adversely impacted training pipelines, future skill/grade-level manning, promotion opportunity, and phase points. In meeting short-term end-strength goals, the Air Force jeopardized the long-term health of the force.”*

*“Sustainment analysis accounts for the realities of dynamic personnel policies, adjusted end strength authorizations, changing mission sets, and fluxing retention. It is also tailored to constantly synchronize inventory with requirements at the career field level.*

*The end product is a yearly distribution of accessions across all core [Air Force Specialties] that fills their requirements and maintains their sustainability over a 30 year span.”*

For each career field, a 30-year OMS emerges by applying the historical behavior of career field assignment availability and attrition. Typically, a year group that is close to the OMS will remain so for the duration of the 30-year career. A career field inventory that matches the OMS is also structured to most efficiently fill its authorizations.

Long-term modeling enables comparison of sustainment health for year groups within the career field. Year groups with inventory surplus beyond the OMS are overmanned, creating assignment inefficiencies and reducing opportunities for servicemen. Year groups with shortfalls (sometimes called “bathtubs”) will be unable to provide necessary capability as they take 20 or 30 years to work through the closed system.



**Figure 8. U.S. Air Force Sustainment Planning Basis.**

The example chart for Air Force Dental Corps Sustainment shown in Figure 8 depicts the OMS (Sustainment Requirement) by year group and inventory availability. Shown as a red line and explained at the right, the OMS indicates the target inventory levels to fill the career field's authorizations, including “Permanent Party” (PP, assigned within the career field), STP, and developmental opportunities (primarily special duties). The inventory identifies categories indicating skill availability (“Not Fully Qualified”, which includes mid-career specialty upgrades) and sensitivity to career decisions, such as prior service (PS) and retirement eligibility.

The Dental Corps example provides an interesting example for force sustainment analysis. In the recent 5 years (2013-2009 at the left of the chart), the career field has a significant surplus

indicating a potential opportunity to scale back recruiting efforts, if not a need to passively or actively “right-size” the year groups. Moving to the right on Figure 8, the year groups making career-retention decisions (2008-2004) demonstrate strong sustainment health: inventory and OMS align well. However, the experienced career officers (2002-1992) demonstrate significant shortfalls that will remain in the system for 10-15 more years: further reduction of this inventory could risk leadership efforts such as command positions for clinics or training efforts to produce more capability. OMS enables measurement of sustainment health for targeted force management efforts as well as potential risk identification for secondary effects of the same programs.

## 4.5 Recommendation 1

Because HPOSP is a force management tool, AOC sustainment is the quantitative basis to weigh the force management value of the HPOSP program. During the programming process, each stakeholder had been independently conducting analysis but sharing little methodology during requirements development. By including AOC analysis alongside HPOSP programming, stakeholders sequentially develop consensus on HPOSP eligibility.

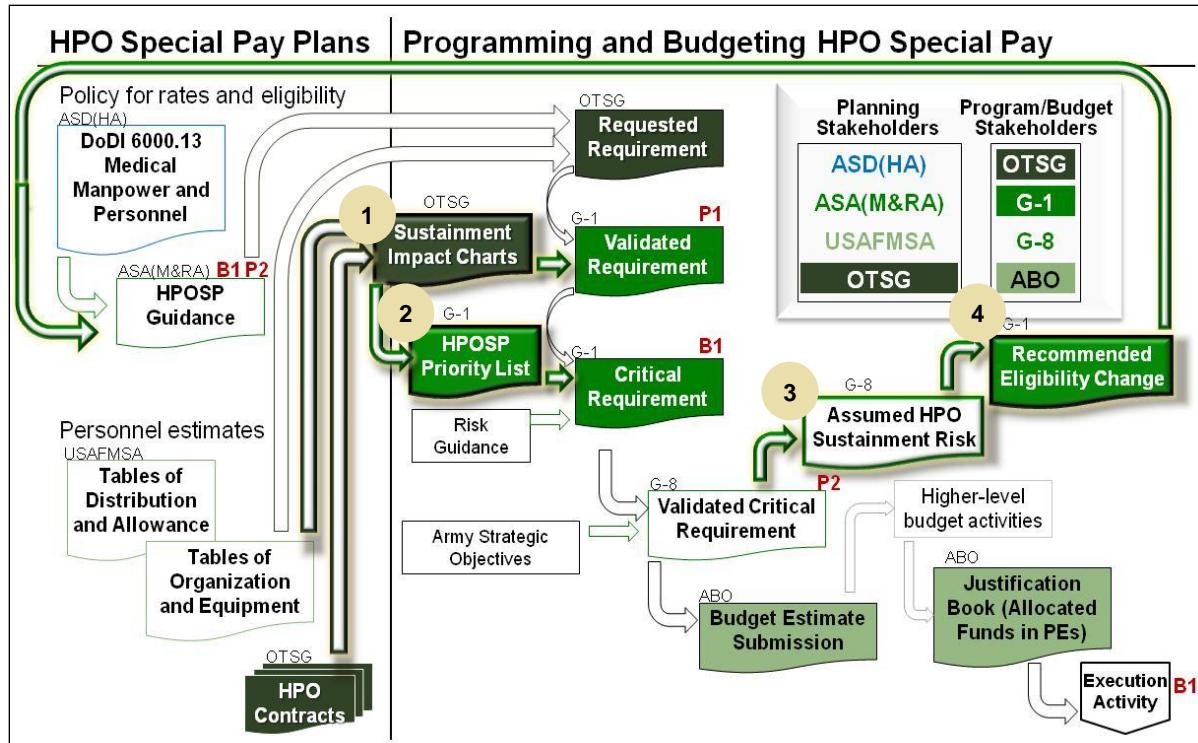
**Recommendation 1:** Stakeholders incorporate measurable force sustainment risk into HPOSP planning and programming.

| Step | Stakeholder    | Recommended Activity   |
|------|----------------|--|
| 1    | OTSG           | Recommends the <i>sustainment impact</i> of HPOSP offered.                   |
| 2    | OTSG, G-1      | <i>Prioritizes</i> HPOSP by impact.  |
| 3    | G-8            | Assumes HPO <i>sustainment risk</i> by choosing HPOSP categories to decline. |
| 4    | G-1, ASA(M&RA) | Develops <i>eligibility guidance</i> incorporating program risk.             |

**Table 5. Recommendation 1 Activities.**

Recommended steps from Table 5 support the already-occurring analysis and responsibilities of stakeholders.

- OTSG analyzes AOC manning to develop the requested requirement.
- G-1 identifies the program impact to develop the critical requirement.
- G-8 sizes the program by considering the value of the HPOSP program against other needs of the Army.
- G-1 is the point of contact for the HPOSP guidance released by ASA(M&RA).



**Figure 9. Change to Programming Process Flow.**

Figure 9 incorporates the recommended steps into the process from for HPOSP planning, programming, and budgeting. Each of the stakeholder-identified conflicts is now preceded by one or more recommended steps. The recommended process changes address each stakeholder conflict as listed in Table 6.

| Stakeholder Conflict  | Process Change  |
|---|---|
| <b>P1.</b> Projected eligible personnel can be estimated in multiple ways to different effect.  | <b>①</b> Sustainment impact charts measure HPO strength against an objective manning standard that incorporates year group information. |
| <b>P2.</b> For some professions, HPOSP does not support needs of the Army.  | <b>②</b> <b>③</b> HPOSP priority as a Force Management tool enables strategic selection of risk to assume within HPOSP.                 |
| <b>B1.</b> As discretionary spending, HPOSP was directed to accept budget risk, but unchanging eligibility policies expended funds at the original requested requirement. | <b>④</b> Assumption of HPOSP sustainment risk enables recommended policy changes regarding HPOSP eligibility and implementation.        |

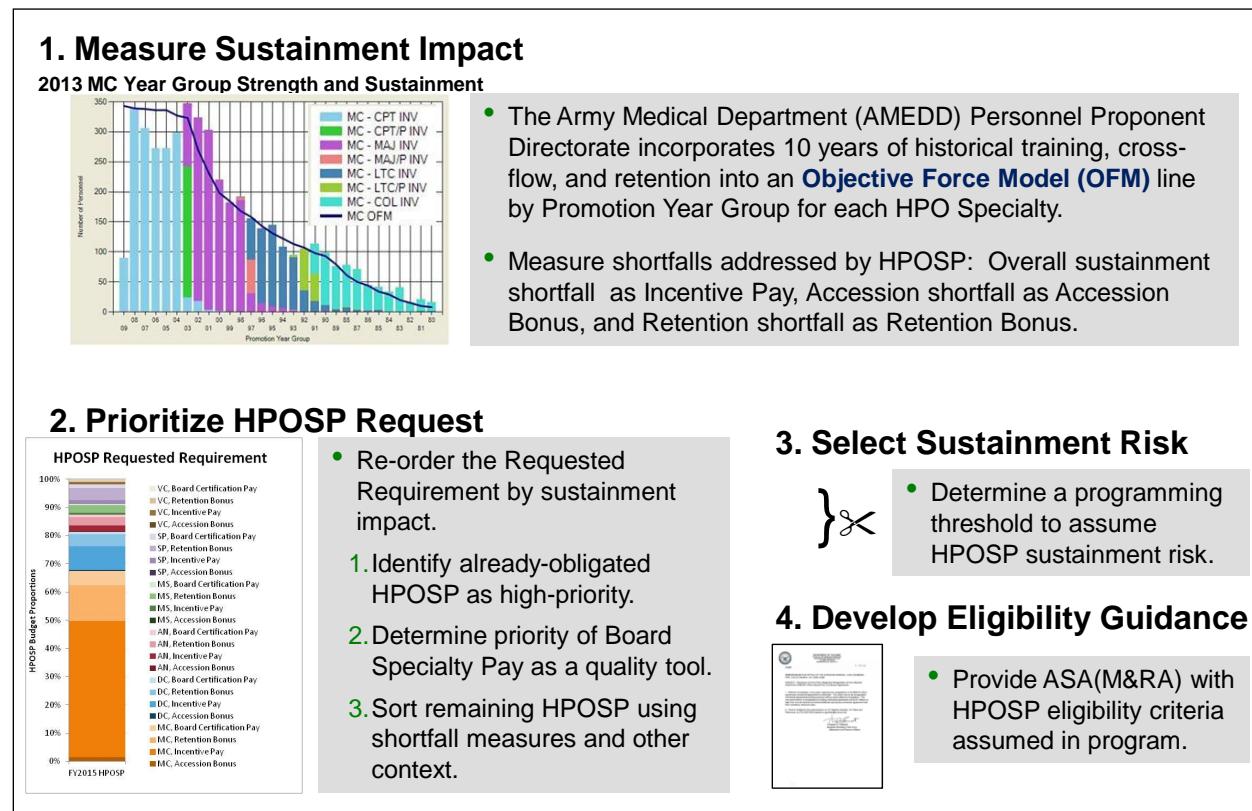
**Table 6. Changes to Reach Stakeholder Consensus.**

To accomplish the recommended process, OTSG must be able to measure the sustainment health targeted by the requested HPOSP. Previously, HPOSP discussions from all stakeholders included analysis based on other factors: comparison of total AOC inventory against total authorizations, mean salary for a comparable job title, etc. An excess of lieutenants does not compensate for a shortage of colonels. Pay parity is no more compelling a concern for HPOs than for any other Soldier. As a force management tool, the only comparison relevant for HPOSP is whether or not the inventory is sufficient for force sustainment.

OTSG already uses an objective sustainment standard. MODS includes the Objective Force Model (OFM) measurements for each year group for each AOC. AMEDD develops the OFM annually; OFM can provide the same role for HPOSP as OMS provides for the U.S. Air Force.

Each type of requested HPOSP affects a different aspect of an AOC's career timeframe. The sustainment health in the affected career zone informs the impact of the HPOSP. Further discussion is provided in Section 6.3. With the measurable shortfall and additional AOC-specific information about the effects of HPOSP, OTSG can recommend sustainment impact for each type of HPOSP.

In conjunction with the critical requirement, G-1 can provide the prioritized HPOSP list to G-8. This list includes the already-obligated portion of HPOSP (signed contracts may be disbursed over multiple years). The priority considers the quantitative need for and manageable risk addressed by incentive pay, accession bonuses, and retention bonuses. When G-8 reduces the size of the HPOSP program, the change is executable from the prioritized request as specific HPOSP eligibility changes. Because G-1 is the point of contact listed for all Army HPOSP eligibility guidance, G-1 can coordinate publication of new guidance in the year between programming and execution.



**Figure 10. Recommended Change to Process Activities.**

Prioritizing the HPOSP Request (Step 2 in Figure 10) requires hundreds of measurements and additional analysis. Although considering AOC-specific career zones within the 96 AOCs creates an analytic burden on OTSG, much of the process may be automated as will be discussed in Chapter 6. When G-8 selects sustainment risk, the entire HPOSP program is unlikely to be cut: the true need is to subset the decision space to the AOC sustainment that the Army

prioritizes as mission critical or mission essential. Additional discussion is provided in APPENDIX D.

To measure the benefit of additional process steps, we consider the perspectives discussed in Section 4.2. For the process to be considered an improvement, recommended changes must address stakeholder priorities.

| Stakeholder Priority |                                | Objective Measurement<br>Process Change 1 | Prioritized Request<br>Process Change 2 | Sustainment Risk<br>Process Change 3 | Eligibility Guidance<br>Process Change 4 |
|----------------------|--------------------------------|---|---|--------------------------------------|--|
| <b>OTSG</b>          | Force sustainment              | 30-year planning                          | Impact drives request                   | Maximized cost effect                | N/A                                      |
| <b>G-1</b>           | Manned authorizations          | Grade-specific need                       | Targeted impact                         | Maximized cost effect                | N/A                                      |
| <b>G-8</b>           | Balance of capability and risk | Shared analytic basis                     | Capability/risk tradeoffs               | Explicit risk                        | Budget drives execution                  |
| <b>ABO</b>           | Executable budget              | N/A                                       | Explicit “must pay”                     | N/A                                  | Budget drives execution                  |

**Table 7. Planning, Programming, and Budgeting Improvement.**

In Table 7, the recommended process changes provide benefit to each of the stakeholders, addressing EEA 2.c. Stakeholders build from a common analytic basis to reach consensus. As a result of programming consensus, allocated funds are more likely to match eligibility and obligations during Execution.

During the interim study update (Section C-3), stakeholders requested further detail on implementation of Recommendation 1. The resulting analysis and decision tool are discussed in Chapter 6. A stand-alone discussion of HPOSP and initial sustainment impact categorization is provided in APPENDIX D.

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## 5 HPOSP DISBURSEMENT CONFLICTS

### 5.1 Disbursement Conflicts

During the execution process, conflict arises when disbursed funds, as reported to Congress (1002 Appropriation Status Report, called “the ten-oh-two”), differ from the Army’s expectation (spend plan). OTSG predicts the monthly HPOSP obligations (money owed by the Army) in the spend plan. DFAS reports the HPOSP funds disbursed (paid) each month. When disbursed funds are lower than the spend plan, obligations are not being met; correction may result in disbursement exceeding the spend plan. When disbursed funds are greater than the spend plan, they may also be greater than allocated funds, which is an ADA violation.

A critical aspect of the execution process is the planned obsolescence of the automated pay system. RMT, which disburses pay, necessitates manual entry for most HPOSP. Worse, the inability to update the system necessitates sharing/repurposing of FIDs, which creates opportunities for accounting errors due to misleading pay descriptions versus the repurposed use. Methods for HPOSP disbursement are described more fully in Section 3.3. In some cases, the conflict arises in accounting for correct disbursement against the spend plan; other conflicts occur because many errors naturally arise when people manually enter thousands of payments each month against FID displays that indicate different purpose than actual. (Disbursement conflicts are also depicted within the as-is process flow in Figure 11.)

**E1.** DFAS manual entries may apply incorrect fund codes.

- Error: Funds are reported to the wrong type of appropriation. This includes HPOSP paid by other types of HPOSP or non-HPOSP funds as well as other types of special pay attributed to HPOSP. For example, lawyers receive a different category of special pay and have sometimes erroneously received HPOSP. Sometimes an analyst inadvertently overlooks some lines on the spreadsheet, and Soldiers don’t receive obligated HPOSP.

**E2.** DFAS funding execution may lag contract execution dates from the spend plan by up to 90 days.

- Accounting challenge: Obligated HPOSP may be upcoming or may have been overlooked in error.
- Accounting challenge: The amount of obligations completed for each of the three preceding months (90 days) is not identifiable from the 1002 report. That is, if 80% of the current month was disbursed along with 50% of the previous month and 30% of the month prior to that, the 1002 report shows an abnormally large spike in payments.

**E3.** Lack of OTSG visibility into DFAS disbursements creates difficulty deconflicting contract executions.

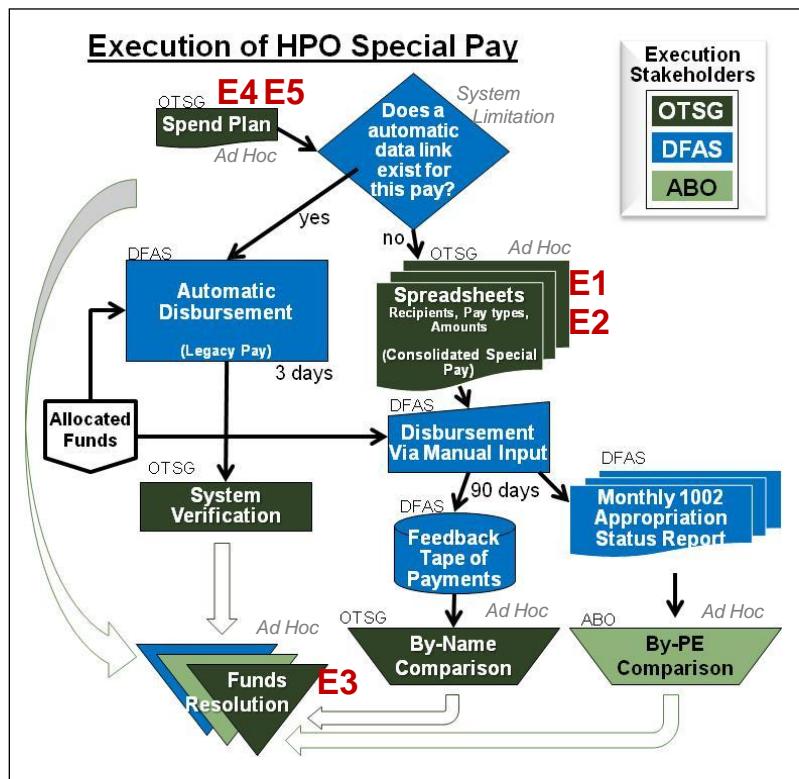
- Accounting challenge: DFAS does not provide direct feedback on the OTSG HPOSP spreadsheets. Feedback is only available as a list of all disbursements (not limited to HPOSP and also not sortable) and as a summary of disbursements against PEs.

**E4.** DFAS disbursement corrections do not prompt a revision of the spend plan.

- Error: When non-HPOSP obligations are incorrectly disbursed from HPOSP funds (**E1**), the funds do not immediately return to the HPOSP accounts. DFAS does not always inform OTSG of funds correction amounts or types, and so, OTSG cannot incorporate corrections into the spend plan about which they are not informed.

**E5.** July execution of one-third of HPOSP creates risk of an ADA violation due to inability to reprogram funds late in the fiscal year.

- Accounting challenge: Because some types of HPOSP are contractually obligated on the anniversary of accession, one-third of the HPOSP budget is obligated for the month of July. Particularly in combination with the 90-day lag for disbursement (**E2**), ABO may not receive warning of obligation beyond allocated funds until the end of the fiscal year (obligations in July and beyond are within 90 days of the end of the fiscal year).



**Figure 11. Disbursement Conflicts in Process Flow Chart.**

When mapped to the process flow in Figure 11, conflicts arise during manual HPOSP disbursement. Viewing the conflicts in the context of resource flow helps us address EEA 2.b. The spend plan becomes increasingly incorrect through the fiscal year due to DFAS system limitations (Issue 2). RMT's replacement capability within GFEBS may be online within FY 2015. In the meantime, manual entry and conflicting FIDs regularly generate disbursement errors. Manual entry increases time between the obligated payment and disbursement, creating confusion regarding HPOSP execution within the spend plan. Because a natural HPOSP feedback loop doesn't exist from DFAS, the spend plan cannot easily incorporate DFAS error correction and disbursement delays as the year progresses towards the majority of HPOSP disbursement.

## 5.2 Quantifiable Stakeholder Priorities

Due to manual entry of payments, error is a fundamental part of existing HPOSP disbursement. As such, stakeholder priorities must be identified for both the intended process and error correction.

| Disbursement Stakeholder | Execution Process   | Error Correction  |
|--------------------------|---|---|
|                          | Reporting disbursements   | Identifying spend plan deviations   |
| <b>OTSG</b>              | Assigned personnel receive HPOSP as contractually obligated.                          | Wrong amount, account, or personnel. <ul style="list-style-type: none"> <li>• Personnel receiving incorrect pay amounts</li> <li>• Pay of the wrong type (from the wrong FID)</li> <li>• Incorrect personnel receiving pay</li> </ul> |
| <b>DFAS</b>              | Funds disbursed by FID, a payment system selection.                                   | Disbursement of the wrong pay (amount or FID) requires manual correction and may require additional personnel training (if a recurring error).  |
| <b>ABO</b>               | Funds disbursed by PE, lines in the budget by which funds are allocated and reported. | Disbursement of funds (by PE) at a faster rate than the spend plan would incur ADA violations if funds are expended and obligations remain.   |

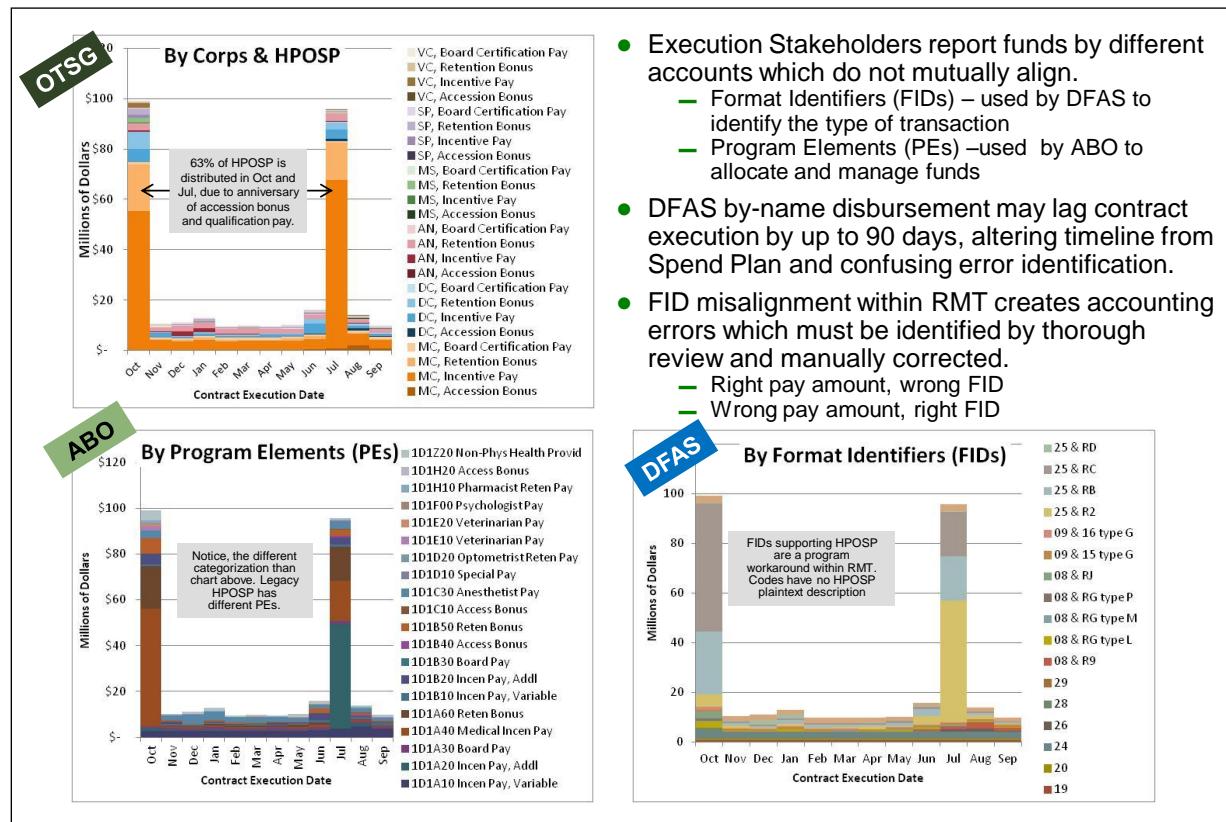
**Table 8. Execution Stakeholder Priorities.**

As shown in Table 8, stakeholder priorities differ during Execution. As the PAMP MPA account holder, G-1 is also an execution stakeholder. Because G-1 priorities align with ABO, discussion of ABO in this section implicitly includes G-1 interests as well.

## 5.3 Basis: Non-Aligned Spend Plan Tracking Measures

Because the scope of the study only includes recommendations that may be implemented by the Army, DFAS system limitations are accommodated but not addressed. Clearly, manual entry for thousands of payments monthly against nonsensical (for example, some HPOSP is entered against nuclear submariner pay) codes creates a persistent opportunity for error that would be solved by automation. For purposes of this study, the significant challenges presented by RMT conversion to GFEBS are accepted as a constraint of the process. A system update accommodating HPOSP would save hundreds to thousands of man-hours monthly for entry, error identification, and disbursement corrections.

When disbursement stakeholders review the 1002 report against the spend plan, each stakeholder uses different language. OTSG considers the HPOSP obligated to Soldiers, consolidated by HPOSP type and AOC/Corps. ABO considers PEs, each of which may incur an ADA violation and some of which are redundant (e.g., both 1D1E10 and 1D1E20 are identified as “Veterinarian Pay”). DFAS enters pay using FIDs, which are an outdated adaptation of previous accounting codes, most of which are now applied for reasons completely different from their labels. An error in any one of the accounting metrics (HPOSP, PEs, or FIDs) must still be resolved down to specific payments made to individual Soldiers in order to correct errors.



**Figure 12. Differing Stakeholder Measures for the Spend Plan.**

As depicted in Figure 12, stakeholders apply different measures to the same events through the year until a large disbursement occurs near the end of the fiscal year. Errors compound through the year, making an ADA violation increasingly difficult to predict. One-third of the budget is obligated in the first month of the fiscal year. *Correct* payments may lag by up to 3 months; error corrections follow *after* error identification. When one-third of the HPOSP budget is obligated within 90 days of the end of the fiscal year, the disbursement lag and the compounding error makes the remaining obligation impossible to reconcile against remaining funds in the account prior to the end of the Execution year.

#### 5.4 Recommendations 2.1 and 2.2

The July disbursement of the largest portion of the budget creates an opportunity to risk an ADA violation. Because the HPOSP obligation must fall on the anniversary of accession *or* of follow-on contract signature, CAA recommends that stakeholders seek policy means to reduce the risk of contract uncertainty late in the fiscal year. If possible, ASA(M&RA) guidance should require or incentivize early signing.

**Recommendation 2.1:** OTSG and G-1 draft policy change to establish an intentional lag between contract signature and bonus execution.

Additionally, payment reconciliation is the primary challenge resulting from manual disbursement. As a temporary solution until GFEBS integration of RMT capability begins, the

study team recommends developing more robust means to resolve DFAS disbursements against the OTSG spreadsheets provided to DFAS. Distinction between delay (lag between obligation and disbursement) and deviation (incorrect payment) would improve error correction tremendously.

**Recommendation 2.2:** OTSG sponsors develop an automated tool to resolve discrepancies by name between FID and PE amounts.

The goal of recommendation 2.2 is to improve discrepancy resolution between the spend plan and disbursement by developing feedback from DFAS to OTSG. OTSG already sends DFAS a monthly by-name spreadsheet of recipients, amounts, and HPOSP. Due to manual entry, DFAS disbursement may follow contract execution by as long as 90 days. Feedback such as a monthly DFAS spreadsheet of disbursements could be used to resolve spend plan obligations: name, FID, Program Element, and amount. A consistent spreadsheet easily supports an automated tool. Additionally, faster error identification can enable incorporating funds returned from DFAS corrections into the spend plan.

| Recommendation  |     |     |
|---|-----|-----|
| Execution Process Conflicts   | 2.1 | 2.2 |
| <b>E1.</b> DFAS manual entries may apply incorrect fund codes.  |     | ✗   |
| <b>E2.</b> DFAS funding execution may lag contract execution dates from the spend plan by up to 90 days.                                      |     | ✗   |
| <b>E3.</b> Lack of OTSG visibility into DFAS disbursements creates difficulty deconflicting contract executions.                              |     | ✗   |
| <b>E4.</b> DFAS disbursement corrections do not prompt a revision of the spend plan.  |     | ✗   |
| <b>E5.</b> July execution of one-third of HPOSP creates risk of Anti-Deficiency Act Violation due to inability to reprogram funds late in FY. | ✗   |     |

**Table 9. Changes to Reduce Spend Plan Deviation**

To address conflicts in the execution process, the study recommends addressing and accommodating DFAS system limitations. Manual HPOSP entry leads to four out of five conflicts; detailed disbursement feedback would increase accounting precision (shown in Table 9). The final conflict arises due to execution late in the fiscal year: disincentivizing late contract signatures reduces risk from over-obligation. By addressing and accommodating DFAS system limitations, the HPOSP execution will be easier to manage.

To measure the benefit of recommendations, we return to the quantitative stakeholder priorities during execution. To improve the process, recommended changes must address stakeholder priorities.

| Stakeholder Priority | 2.1 Contract Execution Guidance      | 2.2 Monthly Disbursement Comparison |
|----------------------|--------------------------------------|-------------------------------------|
| <b>OTSG</b>          | Accurate personnel, pay type, amount | Formalizes early notification       |
| <b>ABO</b>           | Funds sufficient to obligations      | Forewarning of late-FY obligations  |
| <b>DFAS</b>          | Correct disbursement                 | N/A                                 |

**Table 10. Execution Improvement.**

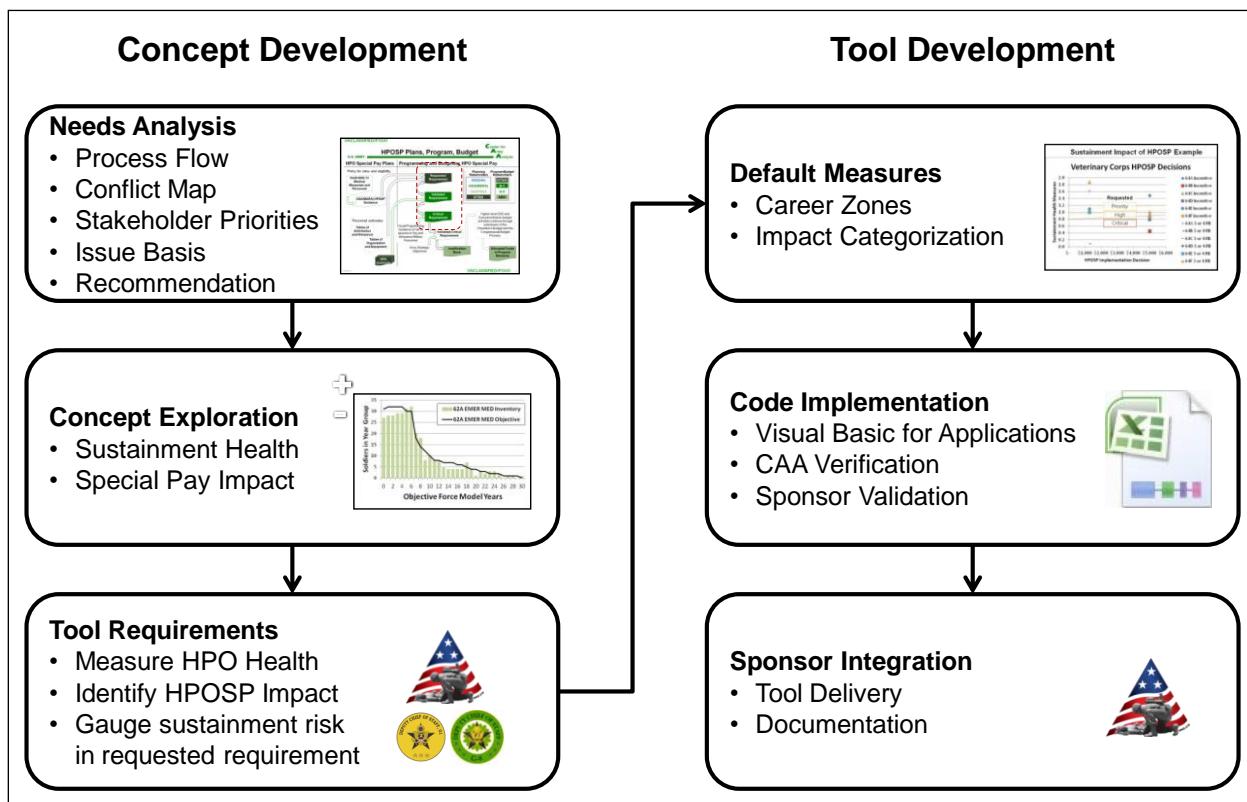
In Table 10, the recommendations reduce fiscal year uncertainty for HQDA and improve error identification during DFAS disbursement. The table addresses EEA 2.c.

During the interim study update (Section C-3), OTSG indicated intent to pursue Recommendation 2.1. Although interest existed in Recommendation 2.2., HQDA stakeholders could not gain automatic HPOSP feedback from DFAS.

## 6 SUPPORT TOOL FOR SUSTAINMENT IMPACT (RECOMMENDATION 1)

### 6.1 Support Tool Methodology

After HPOSP stakeholders received study recommendations, OTSG directed the study team to move forward with recommendation 1: Incorporate measurable force sustainment risk into HPOSP planning and programming. Using a systems engineering approach, the study team more fully defined relevant force sustainment concepts and designed a tool to automate recurring analysis. Concept development included the process needs (completed in Chapter 4), exploration of automated measures, and definition of required tool functionality to support stakeholders. During tool development, the study team developed an Excel workbook to provide recurring analysis in support of measuring force sustainment risk to inform HPOSP programming.

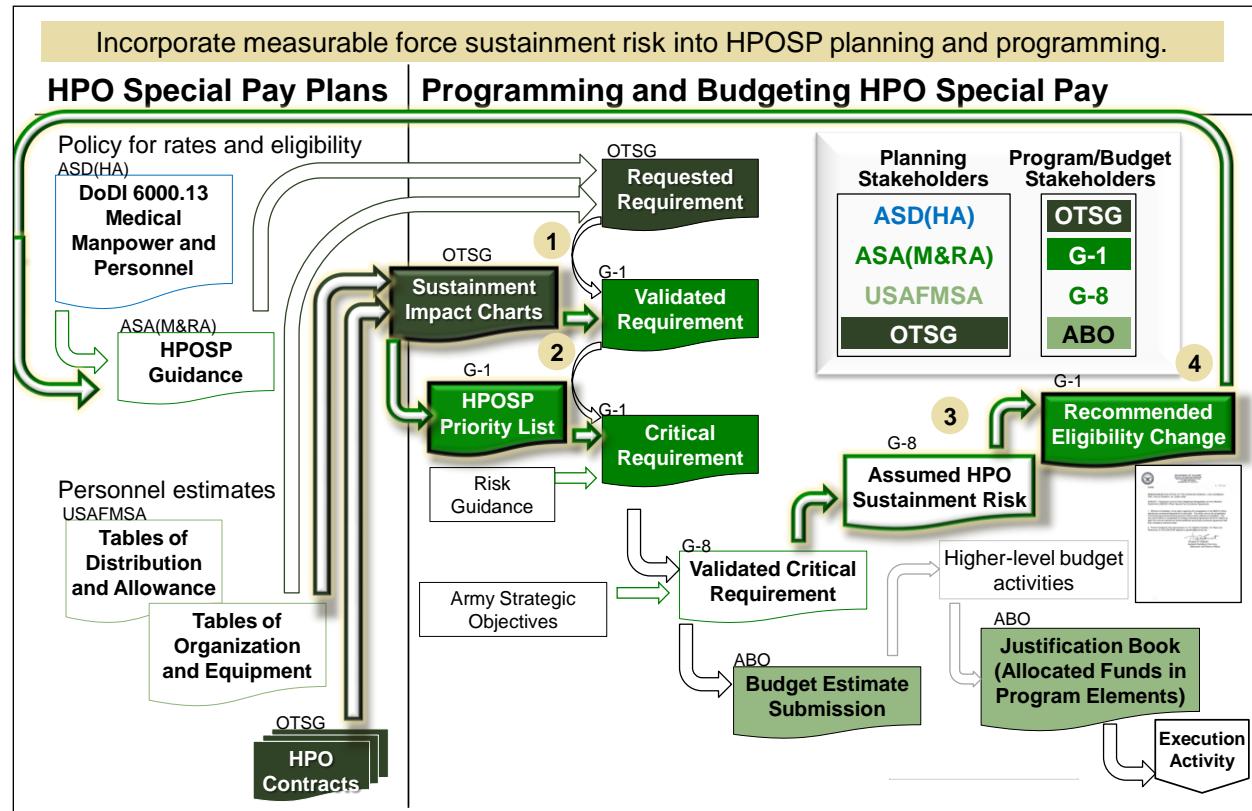


**Figure 13. Support Tool Methodology.**

To allocate HPOSP more closely aligned with the likely execution, the study team addresses EEA 3.b. The concept of the recommendation became requirements for tool development, as depicted in Figure 13. To implement Recommendation 1, programming stakeholders need to create a shared analytic basis to compare HPOSP sustainment value. Because the 96 AOCs have eligibility for all, some, or none of the 4 types of HPOSP, automated analysis greatly simplifies the recommended process change.

## 6.2 Needs Analysis

Recommendation 1 proposed reaching consensus on HPOSP eligibility to more closely align the allocated funds with execution plans. Previously, programming stakeholders developed the budget through the requirements process without ensuring the changes could be executed (described in Section 4.1). By incorporating the sustainment impact of HPOSP as well as a feedback loop for HPOSP changes, allocated HPOSP will align with the planned execution.



**Figure 14. Recommended Process Change to Reach Consensus.**

To implement the recommended process chain, stakeholders must consider the potential sustainment impact for HPOSP. As depicted in Figure 14, the programming stakeholders would develop supporting analysis in parallel with requirements development. From a quantitative and qualitative basis provided by OTSG for each AOC and each type of HPOSP, stakeholders can weigh the value of HPO force management to the Army. Resizing the program will explicitly enable changes to eligibility, resulting in execution more closely aligned with allocated funds.

## 6.3 Concept: Sustainment Health Measurement

As a passive force management tool, HPOSP influences Soldiers considering major changes to their careers. Incentive pay is intended to affect the overall decision to serve for all years within the inventory. Accession bonuses affect the initial qualified supply into the closed military career system for the peak population in early years. Retention bonuses affect all qualified Soldiers in the AOC, but they are most influential early in Soldiers' careers as they decide whether or not to stay until retirement. Soldiers who have invested significant time towards

retirement eligibility are assumed to be less influenced by compensation changes because they are more likely to plan to stay until retirement.

| Opportunities to Affect Sustainability  | OFM-Based Definition of Zone Years   |
|---|--|
| <b>Overall:</b> Likelihood to join and/or stay is affected by <b>Incentive Pay</b> .  | <b>Total inventory:</b> Years 0-30, inclusive  |
| <b>Production:</b> The initial qualified supply who join the Army can be increased with <b>Accession Bonuses</b> .              | <b>Peak OFM years:</b> The 3-year period with <i>maximum OFM value</i> (concluding between years 4 and 15, inclusive)  |
| <b>Career Decision:</b> The decision to stay until retirement is affected by <b>Retention Bonuses</b> .                         | <b>Steepest OFM decline after production:</b> Beginning 2 years following Production and continuing through the largest 5-year OFM decrease (concluding between years 8 and 19, inclusive) |
| <b>Retirement:</b> Loss of any pay amount represents risk: it may decrease leadership retention and strongly impact capability. | <b>Retirement-eligible:</b> Years 20-30, inclusive   |

**Table 11. Career Zone Definition.**

As discussed in Section 1.1, HPOSP is an inventory management tool. HPOSP influences the decisions of individual Soldiers when they are at key inflections in their career paths. Table 11 identifies career zones most affected by changes to HPOSP.

The shape of the OFM (defined in Section 4.5) determines AOC-specific career zone definitions for production and career decisions.

- Production: The OFM peak value is typically at year 3, the conclusion of the initial ADSO. An AOC peak beyond year 3 may occur, particularly for skill upgrades that change AOC (e.g., 66F Nurse Anesthetist may have initially accessed as a 66H Medical Surgical Nurse). Additionally, the AOC may access HPOs with time creditable towards service, which increases the OFM in years after zero.
- Career Decision: In the year at which the AOC population typically considers retirement eligibility a goal, the OFM slope approaches zero as the departure rate decreases. For AOCs in high demand beyond the Army, the decision to remain in the Army until retirement typically happens around year 8. Some Soldiers in AOCs with highly transferable skills are not motivated by retirement benefits, and the slope of the OFM does not vary. AOCs with mid-career accession may already be past the career decision zone.

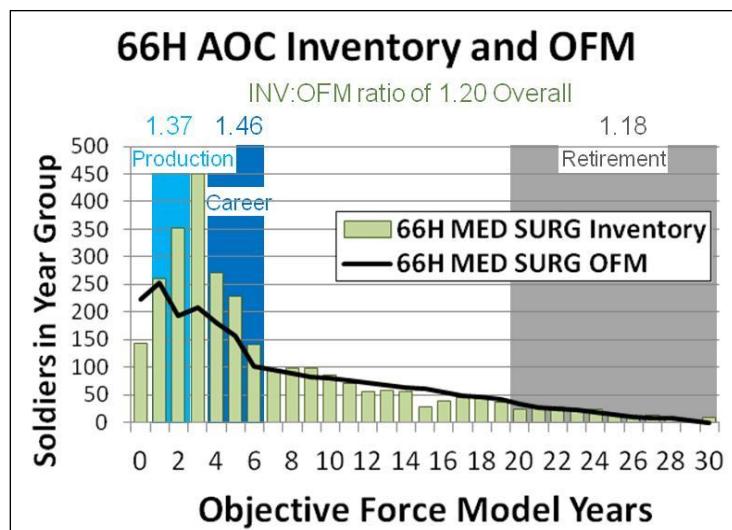
Some year groups may be affected by HPOSP and should be considered to determine potential risk. For example, the retirement-eligible population typically provides leadership and oversight to HPO functions. If retirement-eligible Soldiers are not retained in sufficient numbers, tough assignment decisions may selectively understaff hospital leadership, deployable positions, and training capability. Additionally, committed Soldiers (past the career decision) who are not yet retirement-eligible are among the most productive workers in an organization. They provide capability and supervision with minimal oversight. If an AOC is significantly undermanned in this zone (such as in Figure 8), then force management efforts may be carefully considered to retain core HPO capability as this population functions as the workhorse of the capability and becomes retirement-eligible.

Within each career zone, the sustainment health measures alignment of inventory and OFM. To calculate sustainment health, the sum of inventory in the career zone is divided by the sum of OFM for the same career zone. As discussed in Section 4.4, the Air Force has successfully applied sustainment health measures for personnel force management for nearly 10 years.

$$Health = \frac{\sum_{\text{zoneyears}} \text{inventory}}{\sum_{\text{zoneyears}} \text{OFM}}$$

### Equation 2. Sustainment Health

As seen in Equation 2, the health measure is a simple comparison of available and objective personnel. Ideal sustainment health is equal to 1, the measure at which the inventory is aligned with the most efficient manning to fill authorizations. HPO undermanning (sustainment health less than 1) creates capability shortages, which may affect hospital accreditation, deployable capability, pipeline development, or budgets, as civilian and contractor positions augment uniformed capacity. HPO over-manning (sustainment health greater than 1) diminishes career opportunities for Soldiers at great expense to the Army and may eventually require rightsizing.



**Figure 15. Example of Sustainment Health for an AOC.**

Figure 15 depicts the 66H inventory, OFM, and career zones. All four career zone measures (“overall”, “production”, “career”, and “retirement”) are greater than 1, indicating that the AOC is overmanned. Accession bonuses for production may not be necessary (unless they are particular to a subskill of the AOC). Because the retirement-eligible population is overmanned, reduction in a retention bonus (reducing eligibility below 4 years) may be desirable to encourage manageable attrition.

## 6.4 Concept: Sustainment Impact Suggestion

Impact categories incorporating sustainment health and per capita pay amounts can suggest the mission impact of HPOSP to collapse the HPOSP decision space. Sustainment health measures inventory sufficiency. Per capita annual pay affects Soldiers’ career decisions and is a proxy for measurable and manageable inventory influence. A decision tool can help with *initial* HPOSP impact categorization by reducing the decision space from all potential HPOSP eligibility to focus on overmanned career zones, which may have a manageable response to change in pay.

The influence of HPOSP as a force management tool cannot be exactly predicted. Significant measurements of HPO pay influence revealed variation in influence for the same pay (from the Center for Naval Analyses study referenced in Section 2.4). Not all HPOs have equally transferrable skill sets. Because of the transferability of skills, \$10,000 of additional pay retains far more internal medicine practitioners than surgeons.

The per capita pay amount provides an imperfect proxy for the influence of HPOSP on the inventory. Generally, more pay increases the inventory through more accession and reduced attrition. The influence is imprecise and varies between HPO skills. As a reminder, the only implementation options available in the DoDI are to offer the HPOSP at the *unchangeable* rate or not to offer the HPOSP. Certainly, the loss of \$60,000/annually of incentive pay would more significantly influence a Soldier's professional decisions than a loss of \$30,000/annually. Loss of significant pay should not be recommended lightly because the immediate loss of personnel and long-term force sustainment impact may rapidly become unmanageable.

Just as importantly, the per capita pay amount provides an indicator of potential force management risk. In August 2013, Lieutenant General Patricia Horoho, Army Surgeon General, described the impact to USA Today (Zoroya, Gregg. "Military Civilian medical Workers Quite after Furloughs." *USA Today* 28 Aug 2013. Web. 17 Jan 2014.) During 6 weeks of once-weekly civilian furloughs in spring 2013, Army Medicine lost 5% of Department of the Army Civilian HPOs. The 2.5% reduction from annual salary spurred 1 in 20 HPOs to transfer their skills away from the Military Health System over a period of fewer than 2 months. Uniformed HPOs have the same transferable skills. Because the Army provides more than half of DoD's health services, a significant loss of uniformed HPOs would require the Army to contract more expensive HPOs to continue to provide capability. Because of the closed military career system, significant loss of HPO capability could incur expensive management challenges for 30 years. Loss of significant pay should not be considered without regard to potentially unpredictable and/or unmanageable rapidly developing long-term effects.

By applying a threshold for HPOSP sustainment impact, the decision space collapses from hundreds of possible HPOSP eligibilities to a more manageable consideration of sustainment needs and manageable outcomes. The sustainment impact of incentive pay, retention bonuses, and accession bonuses for all AOCs can be consolidated into broad categories: "requested", "mission critical", and "mission essential". (Board Certification Pay influences inventory quality, which has a different impact than sustainment.) Sustainment health is the objective of HPOSP, but the decision influence and manageable uncertainty of per capita HPOSP becomes greater as the amount increases. Initial thresholds may be suggested by a sustainment health value (e.g., 0.8 sustainment health as critical manning) and a rate increasing with per capita pay (e.g., for each \$10,000 pay, the effect on manning may be as difficult to manage as a drop in sustainment health of 0.2).

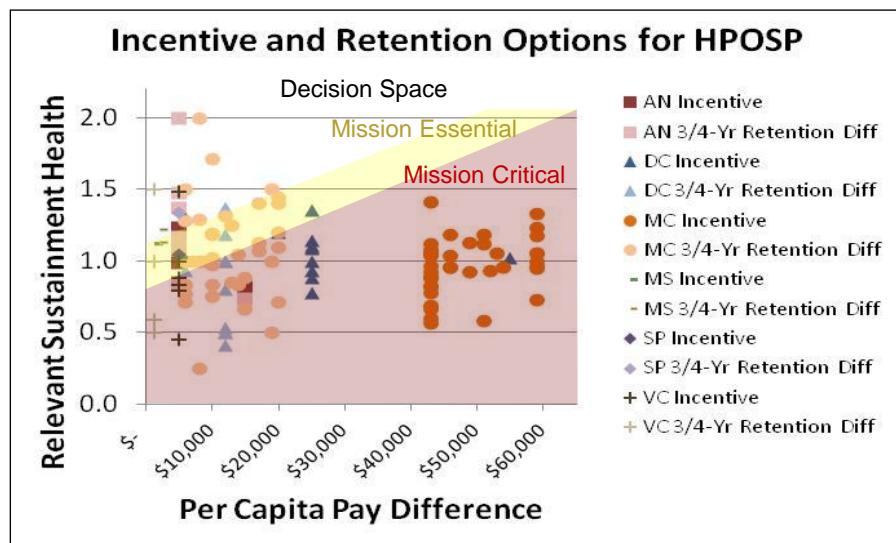
$$\text{essential: } 0.8 < \text{Health} + 0.2 \cdot \frac{\text{per\_capita}}{\$10,000} \leq 1.1$$

#### Equation 3. Thresholds to Suggest Mission Essential Sustainment Impact

$$\text{critical: } \text{Health} + 0.2 \cdot \frac{\text{per\_capita}}{\$10,000} \leq 0.8$$

#### Equation 4. Threshold to Suggest Mission Critical Sustainment Impact.

In Equation 3 and Equation 4, the study team proposes two “sustainment impact” bands to focus HPOSP discussions. A threshold can suggest initial prioritization, but OTSG must apply additional expertise, e.g., the size of the retirement-eligible population (risk), historical AOC patterns, changing medical authorizations, etc. Additionally, the slope of the threshold (a proxy for influence and manageable potential response of per capita pay) may need to be adjusted as stakeholders more closely manage HPOSP and HPO inventories.



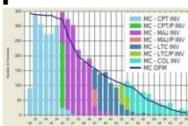
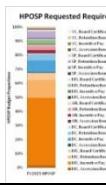
**Figure 16. Available Incentive and Retention Decisions.**

The chart of available incentive bonus and retention bonus decisions displays HPOSP offered in FY13 for each AOC by corps. The x-axis displays the HPOSP decision as it affects Soldiers (proxy for influence and manageability): per capita incentive pay and the per capita annual difference of a 3-year retention bonus versus a 4-year retention bonus. The y-axis displays the sustainment health for the relevant career zone for each AOC (discussed in Table 11): overall for incentive pay and career decision for retention bonus. The thresholds for “mission critical” and “mission essential” (per Equation 4) shade the regions for which HPOSP changes may have significant long-term sustainment risk. Further information may exist which would change sustainment impact for some HPOSP for some AOCs (such as low sustainment health for retirement-eligible HPOs), but broad categorization helps inform a first cut to reduce the HPOSP decision space.

Because the scope of the study only includes recommendations which may be implemented by the Army, the DoDI-published pay rates are accepted as a given. The only flexibility in modifying HPOSP is to offer or not offer HPOSP, or to reduce the retention length of retention bonuses, as discussed in Section 4.3. If the amount of HPOSP could be altered, the markers within Figure 16 could be increased or decreased to more closely align HPOSP amounts with the affected sustainment health. For example, only HPOSP decisions less than \$20,000/annually are available for AOCs with sustainment health measures less than 0.5 (represented in the lower left corner of Figure 16): low sustainment health may indicate that the HPOSP rate is insufficient to achieve the desired influence on the inventory. When the Health Professions Working Group convenes to set HPOSP rates, the Army and Air Force (using OMS) may want to analyze sustainment health measures to suggest rate changes.

## 6.5 Tool Requirements

In implementing recommendation 1 (shown in Figure 14), stakeholders have recurring analysis activities and responsibilities. Some of the recurring activities may be automated. By defining each of the activities and identifying activity that may be automated, stakeholder responsibilities emphasize decisions, rather than research or calculation.

| Recommended Process Steps  | Recurring Analysis Activities  | Workbook Capability   | Stakeholder Responsibility   |
|--|--|---|--|
| <b>1 Measure Sustainment Impact</b><br>     | <b>1A.</b> Incorporate AMEDD OFM and inventory data for each AOC.  | Import OFM files as exported from MODS.   | <b>OTSG</b> must verify AOC-specific career zones. For example, a lengthy initial ADSO may retain peak population longer than the production zone should be measured.  |
|  | <b>1B.</b> Apply an objective measure of sustainment health.   | Adjust career zones and apply sustainment health measures.  |  |
| <b>2 Prioritize HPOSP Request</b><br>      | <b>2A.</b> Incorporate HPOSP proposed in the requested requirement.  | Store OTSG-provided HPOSP amounts and context.  | <b>OTSG</b> and <b>G-1</b> must incorporate additional expertise into HPOSP prioritization, such as retirement-eligible sustainment health, changing medical strategies, etc.  |
|  | <b>2B.</b> Roughly gauge potential sustainment impact for each type of HPOSP for each AOC.                             | Visualize AOC data, including OFM, sustainment health, and available pay.                                   |  |
| <b>3 Select Sustainment Risk</b><br>      | <b>3.</b> Associate sustainment risk and HPOSP funding requirement with each type of HPOSP in total HPOSP requirement. | Categorize total requested requirement and category of sustainment impact for each type of requested HPOSP. | <b>G-8</b> must identify HPOSP program cuts as acceptable sustainment risk through changes to HPOSP eligibility. <b>OTSG</b> must calculate budget effects of HPOSP eligibility changes. For example, retention bonuses are multi-year “must pay” obligations. |
| <b>4 Develop Eligibility Guidance</b><br> | <b>4.</b> Consolidate a list of all HPOSP to be offered.   | Display a static list of HPOSP programmed for the validated critical requirement.                           | <b>G-1</b> and <b>ASA(M&amp;RA)</b> must publish new HPOSP eligibility guidance.   |

**Table 12. Automation and Responsibilities in Recommended Process Change.**

In Table 12, measures of sustainment health provide the basis for prioritizing, rightsizing, and implementing the HPOSP Program. Some of the activities can be supported by automated analytical support in a Microsoft Excel workbook. Each process step still requires the judgment and expertise of one or two stakeholders.

For recommendation 1 to be feasible, automation must produce hundreds of sustainment health measures from AOC-dependent career zones. To share priorities during the requirements-development process, stakeholders must consistently share measurements in the context of AOC inventory, OFM, and available HPOSP. To translate HPOSP program cuts into eligibility

changes, the total cost for each AOC and each type of HPOSP offered must be consolidated into a list with supporting detail such as force sustainment measures and per capita HPOSP amount.

Automated analytical support is not a replacement for stakeholder insight. Although sustainment health provides a strong basis to inform HPOSP priority, the Military Health System is undergoing significant change as the United States concludes over a decade of persistent conflict. At the same time, budget pressures may require the Army to make decisions that cut into mission critical programs.

## 6.6 Decision Tool Implementation

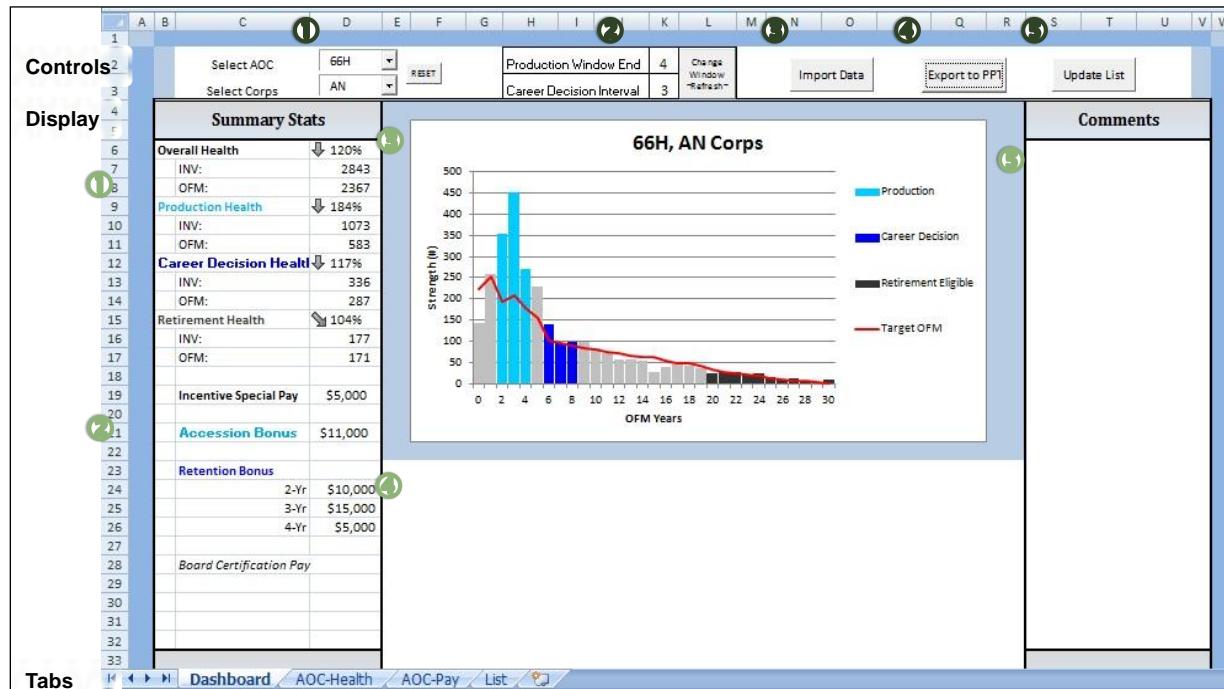
The study team implemented the recurring analysis activities (from Table 12) as capabilities in a Microsoft Excel workbook. (In Defense Acquisition terminology, each of the workbook capabilities would be considered a functional requirement). The resulting decision tool had three types of components: controls, display, and tabs. The decision tool may have additional components to support user interaction, but at a minimum, the workbook must support the recurring analysis activities to make HPOSP prioritization possible.

| Tool Implementation   | Analysis Activities |    |    |    |     |
|---|---------------------|----|----|----|-----|
|   | 1A                  | 1B | 2A | 2B | 3/4 |
| <b>Controls</b> <i>heading the Dashboard</i> : Alters workbook display or content |                     |    |    |    |     |
| ① Select AOC for visualization.   |                     |    |    |    |     |
| ② Adjust career zones.  |                     | X  |    |    |     |
| ③ Reload AOC inventory and OFM.   | X                   |    |    |    |     |
| ④ Generate an AOC image slide.  |                     |    | X  |    |     |
| ⑤ Produce static HPOSP summary.   |                     |    |    | X  |     |
| <b>Display</b> <i>within the Dashboard</i> : AOC summary information              |                     |    |    |    |     |
| ① Inventory Health  |                     | X  |    |    |     |
| ② Special Pay   |                     |    | X  |    |     |
| ③ OFM Visualization   |                     |    |    |    |     |
| ④ Free text space   |                     |    |    |    |     |
| ⑤ Free text space   |                     |    |    |    |     |
| <b>Tabs</b> : Decision support  |                     |    |    |    |     |
| Dashboard: Functional tool control and AOC display                                |                     |    |    | X  |     |
| AOC-Health <i>hidden</i> : Inventory and OFM data loaded by control ③             | X                   | X  |    |    |     |
| AOC-Pay: Special pay data free-entered by OTSG                                    |                     |    | X  |    |     |
| List: By-AOC static Health and Pay data loaded by control ⑤                       |                     |    |    |    | X   |

**Table 13. Workbook Components and Analysis Activities.**

As shown in Table 13, some controls and display support workbook functionality without directly supporting analysis activities. The decision tool opens to the dashboard, from which the user explores AOC sustainment health. All modifications to the workbook content occur from controls on the dashboard and free-entry of HPOSP information in the “AOC-Pay” worksheet. To support eligibility discussions, each AOC can be independently viewed on the dashboard, including available HPOSP, inventory, OFM, and sustainment health measures. To develop an

overall HPOSP program, the user can copy, augment, prioritize, and rightsize sustainment and HPOSP information listed by AOC in the final workbook (“List”).



**Figure 17. Dashboard.**

By opening to the dashboard, the controls, display, and tabs are all immediately available within the workbook. Components in Figure 17 are defined in Table 13. Each of the controls will be discussed in more detail in the following paragraphs. The displayed components provide HPOSP context (described with control ④) and interactive access to AOC visualization (selected by control ① with career zones modified by control ②).

To provide the HPOSP context shown in display ② and in the List worksheet, the decision tool relies upon free entry of by-AOC information in a separate worksheet (tab): AOC-Pay.

Incorporation of per capita HPOSP supports activity 2A to categorize potential HPOSP sustainment impact and activity 4 to consolidate HPOSP context for each AOC. The worksheet also stores both default and user-selected career zone inflection points in support of activity 1B.

The user must conform to the rigid structure of AOC-Pay to ensure the workbook continues to run smoothly. Any deviation from the structure may break the decision tool. For example, pay amounts entered as text will not allow the tool to categorize sustainment impact. Also, misspelled AOCs (e.g., 6H6 instead of 66H) will align incorrectly against the AOC inventory and OFM.

|    | A   | B     | C          | D               | E                       | F      | G              | H                  | I              | J              | K              | L              | M                     | N                     | O                     | P                        | R | S | T |
|----|-----|-------|------------|-----------------|-------------------------|--------|----------------|--------------------|----------------|----------------|----------------|----------------|-----------------------|-----------------------|-----------------------|--------------------------|---|---|---|
| 1  | AOC | Corps | Name       | Accession Bonus | Board Certification Pay | % Qual | Incentive 1 Yr | Incentive Multi-Yr | Retention 2 Yr | Retention 3 Yr | Retention 4 Yr | Retention Diff | Incentive Requirement | Retention Requirement | Production Window End | Career Decision Interval |   |   |   |
| 2  | 66B | AN    | CMTY HLTH  | \$ 4,000        | \$ 6,000                | 25%    | \$ 5,000       |                    | \$ 5,000       | \$ 10,000      | \$ 15,000      | \$ 5,000       | \$ 124                | \$ 230                |                       |                          |   |   |   |
| 3  | 66C | AN    | PSYCH      | \$ 5,000        | \$ 6,000                | 25%    | \$ 5,000       |                    | \$ 5,000       | \$ 10,000      | \$ 15,000      | \$ 5,000       | \$ 120                | \$ 223                |                       |                          |   |   |   |
| 4  | 66E | AN    | OPER RM    | \$ 4,000        | \$ 6,000                | 25%    | \$ 5,000       |                    | \$ 5,000       | \$ 10,000      | \$ 15,000      | \$ 5,000       | \$ 369                | \$ 686                |                       |                          |   |   |   |
| 5  | 66F | AN    | CRNA       | \$ 9,000        | \$ 6,000                | 100%   | \$ 15,000      |                    | \$ 10,000      | \$ 20,000      | \$ 35,000      | \$ 15,000      | \$ 3,945              | \$ 5,273              |                       |                          |   |   |   |
| 6  | 66G | AN    | OB GYN     | \$ 4,000        | \$ 6,000                | 25%    | \$ 5,000       |                    | \$ 5,000       | \$ 10,000      | \$ 15,000      | \$ 5,000       | \$ 249                | \$ 463                |                       |                          |   |   |   |
| 7  | 66H | AN    | MED SURG   | \$ 2,000        | \$ 6,000                | 5%     | \$ 5,000       |                    | \$ 5,000       | \$ 10,000      | \$ 15,000      | \$ 5,000       | \$ 500                | \$ 930                |                       |                          |   |   |   |
| 8  | 66N | AN    |            |                 |                         |        |                |                    |                |                |                |                |                       |                       |                       |                          |   |   |   |
| 9  | 66P | AN    | NRSE PRAC  | \$ 10,000       | \$ 6,000                | 80%    | \$ 5,000       |                    | \$ 5,000       | \$ 10,000      | \$ 15,000      | \$ 5,000       | \$ 656                | \$ 1,876              |                       |                          |   |   |   |
| 10 | 66R | AN    |            |                 |                         |        |                |                    |                |                |                |                |                       |                       |                       |                          |   |   |   |
| 11 | 66W | AN    |            |                 |                         |        |                |                    |                |                |                |                |                       |                       |                       |                          |   |   |   |
| 12 | 63A | DC    | GEN DEN    | \$ 3,000        | \$ 6,000                |        | \$ 20,000      | \$ 20,000          | \$ 13,000      | \$ 19,000      | \$ 25,000      | \$ 6,000       | \$ 7,120              | \$ 2,919              |                       |                          |   |   |   |
| 13 | 63B | DC    | COMP DEN   | \$ 12,000       | \$ 6,000                |        | \$ 25,000      | \$ 25,000          | \$ 25,000      | \$ 38,000      | \$ 50,000      | \$ 12,000      | \$ 7,125              | \$ 4,646              |                       |                          |   |   |   |
| 14 | 63D | DC    | PERIO DEN  | \$ 7,000        | \$ 6,000                |        | \$ 25,000      | \$ 25,000          | \$ 25,000      | \$ 38,000      | \$ 50,000      | \$ 12,000      | \$ 1,200              | \$ 782                |                       |                          |   |   |   |
| 15 | 63E | DC    | ENDO DEN   | \$ 6,000        | \$ 6,000                |        | \$ 25,000      | \$ 25,000          | \$ 25,000      | \$ 38,000      | \$ 50,000      | \$ 12,000      | \$ 1,375              | \$ 897                |                       |                          |   |   |   |
| 16 | 63F | DC    | PROSTH DEN | \$ 10,000       | \$ 6,000                |        | \$ 25,000      | \$ 25,000          | \$ 25,000      | \$ 38,000      | \$ 50,000      | \$ 12,000      | \$ 1,500              | \$ 978                |                       |                          |   |   |   |
| 17 | 63H | DC    | PUB HLTH   |                 | \$ 6,000                |        | \$ 25,000      | \$ 25,000          | \$ 25,000      | \$ 38,000      | \$ 50,000      | \$ 12,000      | \$ 100                | \$ 65                 |                       |                          |   |   |   |
| 18 | 63K | DC    | PEDS DEN   |                 | \$ 6,000                |        | \$ 25,000      | \$ 25,000          | \$ 25,000      | \$ 38,000      | \$ 50,000      | \$ 12,000      | \$ 625                | \$ 408                |                       |                          |   |   |   |
| 19 | 63M | DC    | ORTHO DEN  | \$ 8,000        | \$ 6,000                |        | \$ 25,000      | \$ 25,000          | \$ 25,000      | \$ 38,000      | \$ 50,000      | \$ 12,000      | \$ 775                | \$ 505                |                       |                          |   |   |   |
| 20 | 63N | DC    | ORAL SURG  | \$ 7,000        | \$ 6,000                |        | \$ 55,000      | \$ 75,000          | \$ 25,000      | \$ 38,000      | \$ 50,000      | \$ 12,000      | \$ 4,977              | \$ 1,288              |                       |                          |   |   |   |
| 21 | 63P | DC    | PATH DEN   |                 | \$ 6,000                |        | \$ 25,000      | \$ 25,000          | \$ 25,000      | \$ 38,000      | \$ 50,000      | \$ 12,000      | \$ 225                | \$ 147                |                       |                          |   |   |   |
| 22 | 63R | DC    |            |                 | \$ 6,000                |        |                |                    |                |                |                |                |                       |                       |                       |                          |   |   |   |
| 23 | 60A | MC    |            |                 | \$ 6,000                |        |                |                    |                |                |                |                |                       |                       |                       |                          |   |   |   |
| 24 | 60B | MC    | NUC MED    |                 | \$ 6,000                |        | \$ 51,000      | \$ 51,000          | \$ 12,000      | \$ 18,000      | \$ 27,000      | \$ 9,000       | \$ 918                | \$ 164                |                       |                          |   |   |   |
| 25 | 60C | MC    | PREV MED   | \$ 6,000        | \$ 6,000                |        | \$ 43,000      | \$ 43,000          | \$ 13,000      | \$ 20,000      | \$ 30,000      | \$ 10,000      | \$ 3,268              | \$ 769                |                       |                          |   |   |   |
| 26 | 60D | MC    | OCC MED    |                 | \$ 6,000                |        | \$ 43,000      | \$ 43,000          | \$ 13,000      | \$ 20,000      | \$ 30,000      | \$ 10,000      | \$ 1,548              | \$ 364                |                       |                          |   |   |   |
| 27 | 60F | MC    | PULMON MED | \$ 8,000        | \$ 6,000                |        | \$ 46,000      | \$ 49,000          | \$ 21,000      | \$ 31,000      | \$ 45,000      | \$ 14,000      | \$ 1,935              | \$ 630                |                       |                          |   |   |   |
| 28 | 60G | MC    | GASTRO MED | \$ 10,000       | \$ 6,000                |        | \$ 49,000      | \$ 52,000          | \$ 22,000      | \$ 33,000      | \$ 50,000      | \$ 17,000      | \$ 1,908              | \$ 640                |                       |                          |   |   |   |
| 29 | 60H | MC    | CARDIO MED | \$ 11,000       | \$ 6,000                |        | \$ 59,000      | \$ 64,000          | \$ 21,000      | \$ 34,000      | \$ 51,000      | \$ 17,000      | \$ 2,745              | \$ 772                |                       |                          |   |   |   |
| 30 | 60J | MC    | OB/GYN MED | \$ 7,000        | \$ 6,000                |        | \$ 54,000      | \$ 54,000          | \$ 17,000      | \$ 25,000      | \$ 35,000      | \$ 10,000      | \$ 8,100              | \$ 1,812              |                       |                          |   |   |   |
| 31 | 60K | MC    | UROL MED   | \$ 9,000        | \$ 6,000                |        | \$ 51,000      | \$ 51,000          | \$ 20,000      | \$ 30,000      | \$ 45,000      | \$ 15,000      | \$ 2,193              | \$ 654                |                       |                          |   |   |   |
| 32 | 60L | MC    | DERM MED   | \$ 8,000        | \$ 6,000                |        | \$ 43,000      | \$ 43,000          | \$ 17,000      | \$ 25,000      | \$ 38,000      | \$ 13,000      | \$ 2,279              | \$ 678                |                       |                          |   |   |   |
| 33 | 60M | MC    | ALLERG MED | \$ 9,000        | \$ 6,000                |        | \$ 46,000      | \$ 49,000          | \$ 12,000      | \$ 17,000      | \$ 25,000      | \$ 8,000       | \$ 1,133              | \$ 204                |                       |                          |   |   |   |
| 34 | 60N | MC    | ANESTH MED | \$ 6,000        | \$ 6,000                |        | \$ 59,000      | \$ 73,000          | \$ 25,000      | \$ 40,000      | \$ 60,000      | \$ 20,000      | \$ 6,848              | \$ 2,141              |                       |                          |   |   |   |
| 35 | 60P | MC    | PEDS MED   | \$ 5,000        | \$ 6,000                |        | \$ 43,000      | \$ 43,000          | \$ 13,000      | \$ 20,000      | \$ 30,000      | \$ 10,000      | \$ 5,676              | \$ 1,336              |                       |                          |   |   |   |

Figure 18. AOC-Pay Worksheet.

The AOC-Pay worksheet must maintain consistent format. As shown to the right in Figure 18 warnings in bright yellow define the limits of user interaction. OTSG believes the rigidity of the worksheet will be maintained: because AOCs and HPOSP eligibility change little over time, the entries may be updated but structure remains unchanged.

The decision tool stores AOC data in a hidden worksheet: AOC-Health (shown in Figure 17 as a component). AOC data provides the basis for activity **1A**, incorporation of OFM and inventory into the HPOSP programming process. The data are hidden because the inventory and OFM by year for each AOC do not need to be directly modified by the user. Users may need to refresh data: AOC inventory can change daily, and OFM updates annually.

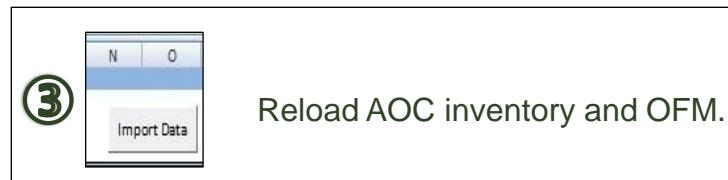
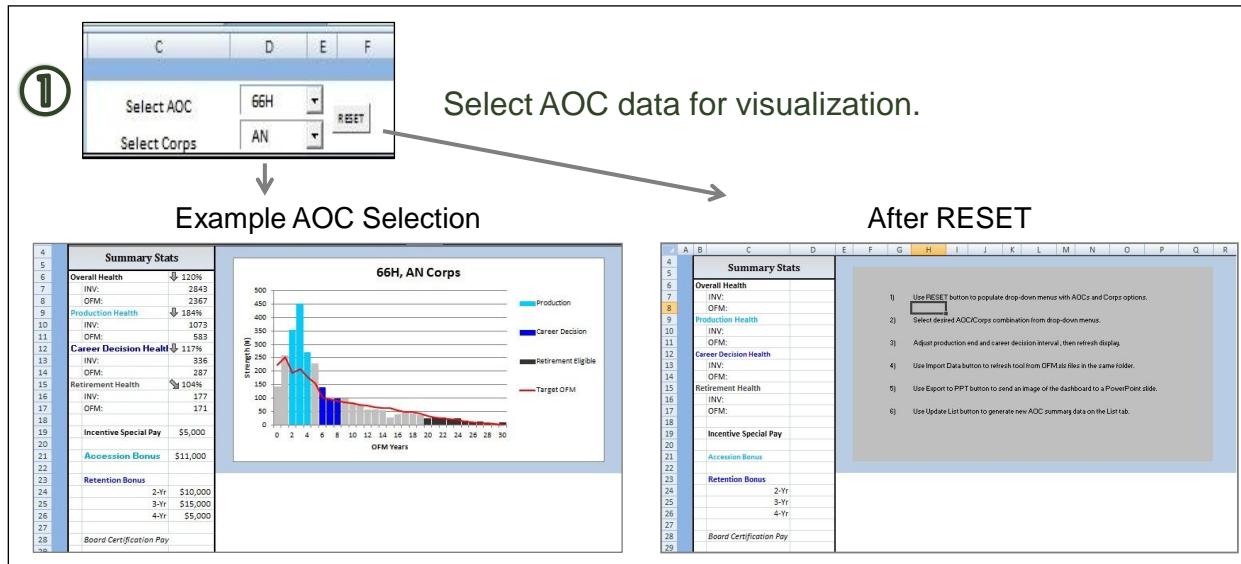


Figure 19. Control 3: AOC Data Reload.

One button click incorporates new data into the workbook, as shown in Figure 19. For control ③ to work successfully, the user must follow rules for file source, location, and name. The unmodified standard output files from MODS must have the Corps abbreviation followed by “OFM.xls”. The folder with the decision tool must have the following files: “AN OFM.xls”, “DC OFM.xls”, “MC OFM.xls”, “MS OFM.xls”, “SP OFM.xls”, and “VC OFM.xls”. MODS produces these files as an output option; necessary formatting for tool use occurs when the

decision tool imports the data. As long as the same directory holds the decision tool and the six corps files, the user only needs to click the “Import Data” button at the top center of the dashboard to use updated data.

The user interacts with AOC data from the dashboard. Within the workbook, the most common interaction will be AOC visualization: Control ①. From the dashboard, this control enables the user to interact with the AOC (by adjusting career zones) and to get a view of the available HPOSP in the context of AOC sustainment health.



**Figure 20. Control 1: AOC Display.**

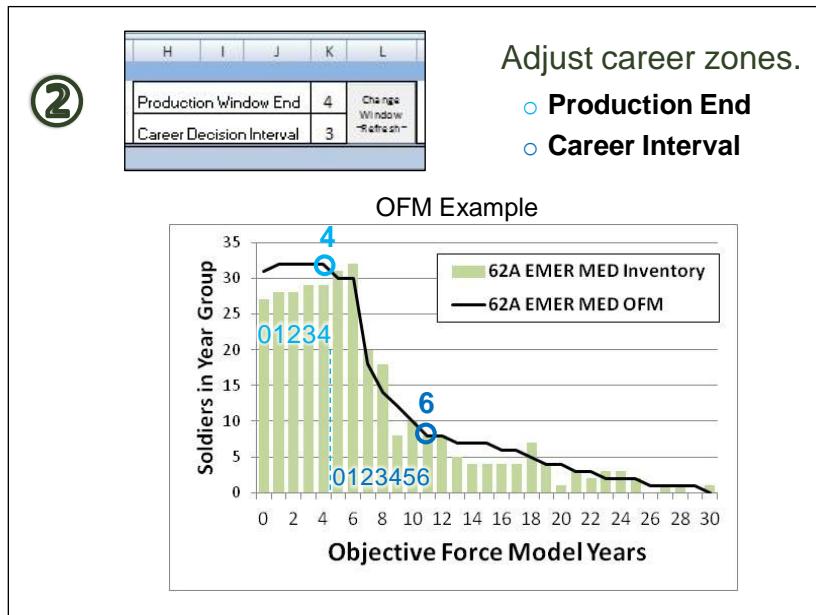
The user sets the dashboard display from the top-left corner, which produces the two screens shown in Figure 20. The user can select an AOC to view from a dropdown list of all AOCs or may subset the AOC list by first selecting a corps. The RESET button clears AOC data from the display, revealing descriptions of the controls (the first two lines refer to the same control: “AOC Selection” and “RESET”).

With an AOC selected, the user can adjust career zones. OFM shape varies by AOC due to skill production timelines, incurred ADSO, and career development paths. By adjusting career zones, OTSG uses force management expertise to define sustainment health for activity 1B.

Distinct inflections in OFM indicate opportunities to affect force sustainability. The decision tool identifies the end of the (3-year) production and the number of years following production to the conclusion of the career decision. Although the user-selected values (set in control ② on the dashboard) are retained in the “List” worksheet, the spreadsheet also stores default values (which are regenerated each time new data are loaded in Control ③).

- **Production:** Accession bonuses attract fully qualified HPOs with creditable time.
  - This OFM peak value is bounded by years 4 and 15, inclusive.
  - The default value is at the maximum 3-year lagging moving average.
  - Production includes the previous 2 years.
- **Career Decision:** Retention bonuses influence the decision to become career Soldiers.

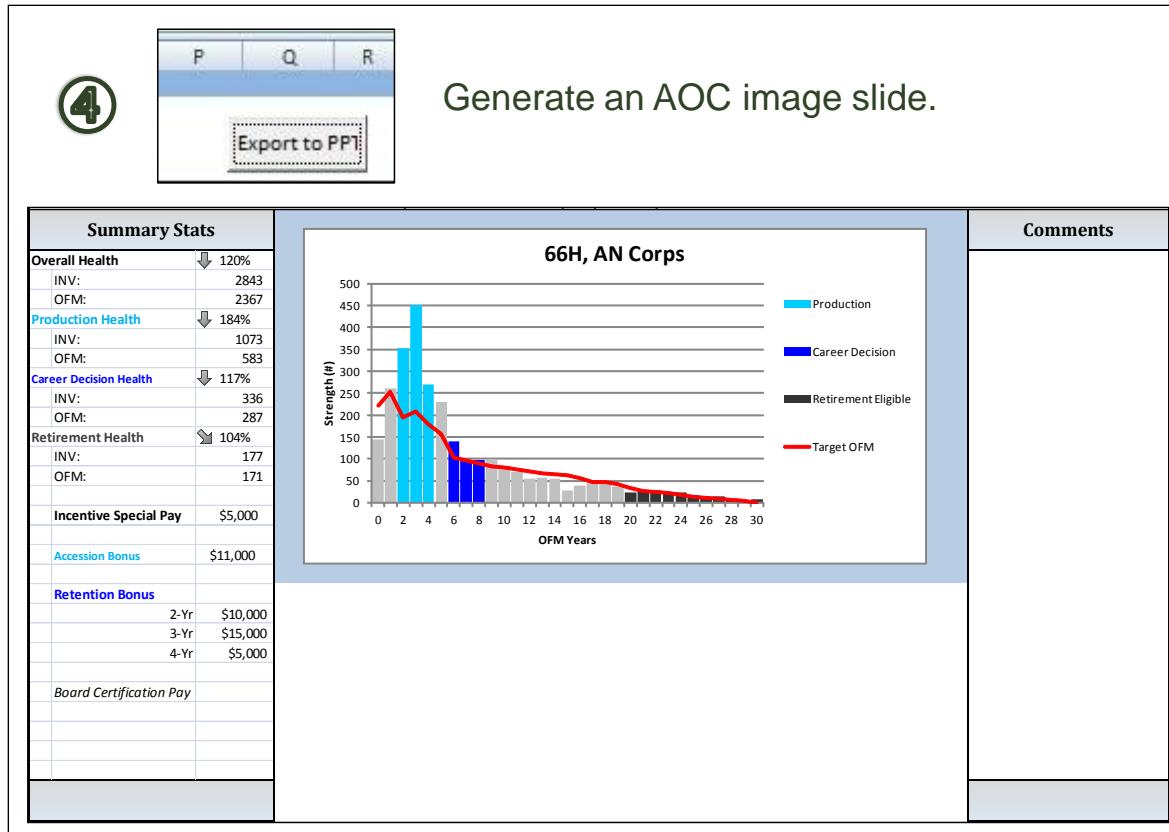
- The end of the largest OFM decrease is bounded by years 8 and 19, inclusive.
- The default value is at the greatest 5-year lagging difference.
- A 1-year gap exists between production and career decision.



**Figure 21. Control 2: Career Zones.**

Figure 21 depicts the inventory and OFM for the 62A AOC (*not* as shown in the decision tool). The AOC has a peak value in year 4 followed by a 6-year period (beginning with year 0) as the OFM drops sharply. In this example, the default for the career decision interval would be five, and the user may want to change the value to six by entering it in the textbox and clicking the adjacent button to save the value (to the “List” worksheet). When the user enters a value in the career zone textboxes and clicks the button, the worksheet saves the values and applies them to measure sustainment health.

Career zone sustainment health, inventory totals, and OFM totals are in display ① on the dashboard at left, with available HPOSP in display ②, below. These values and the sustainment chart provide the basis for consensus in the recommended HPOSP requirements process. The unmodifiable visualization can be exported from the workbook as a standardized display. The Air Force (discussed in Section 4.4) provides analytic support to sustainment discussions as a standard display including both charts and text in slide-sized images. Control ④ enables stakeholders to view AOC data to discuss sustainment impact per activity 2B.



**Figure 22. Control 4: AOC Output.**

A consistent, unmodifiable explanation of HPOSP as a force sustainment tool creates a common foundation for HPOSP requirements development and programming decisions. By generating an image (rather than an updateable table) as shown in Figure 22, AOC health measures provide a consistent analytical basis for HPOSP requirements development. The chart includes summary statistics (display ① and ②), the sustainment chart (display ③), and space to add AOC-specific context (display ④ and ⑤). To simplify interpretation, the sustainment health measures at the upper left also include conditional formatting to indicate when inventory numbers should be brought up or down to reach ideal sustainment health: inventory at 100% of OFM. (Although sustainment health measurements have previously been discussed a ratio, manning levels are also typically discussed as a percentage with a broader audience, e.g., “The career field is manned at 120%.”) When the user clicks the “Export to PPT” button on the dashboard, a new presentation in Microsoft PowerPoint opens with an image on the current dashboard.

AOC depictions provide the basis to discuss the sustainment impact of specific HPOSP eligibility changes within the HPOSP program. Requirements development shapes the total HPOSP Program cost. To view overall HPO health potentially affected by HPOSP, control ⑤ updates the “List” worksheet as shown in Figure 23. Suggesting HPOSP impact categories supports activity 3; consolidating a list of available HPOSP with sustainment context supports activity 4.

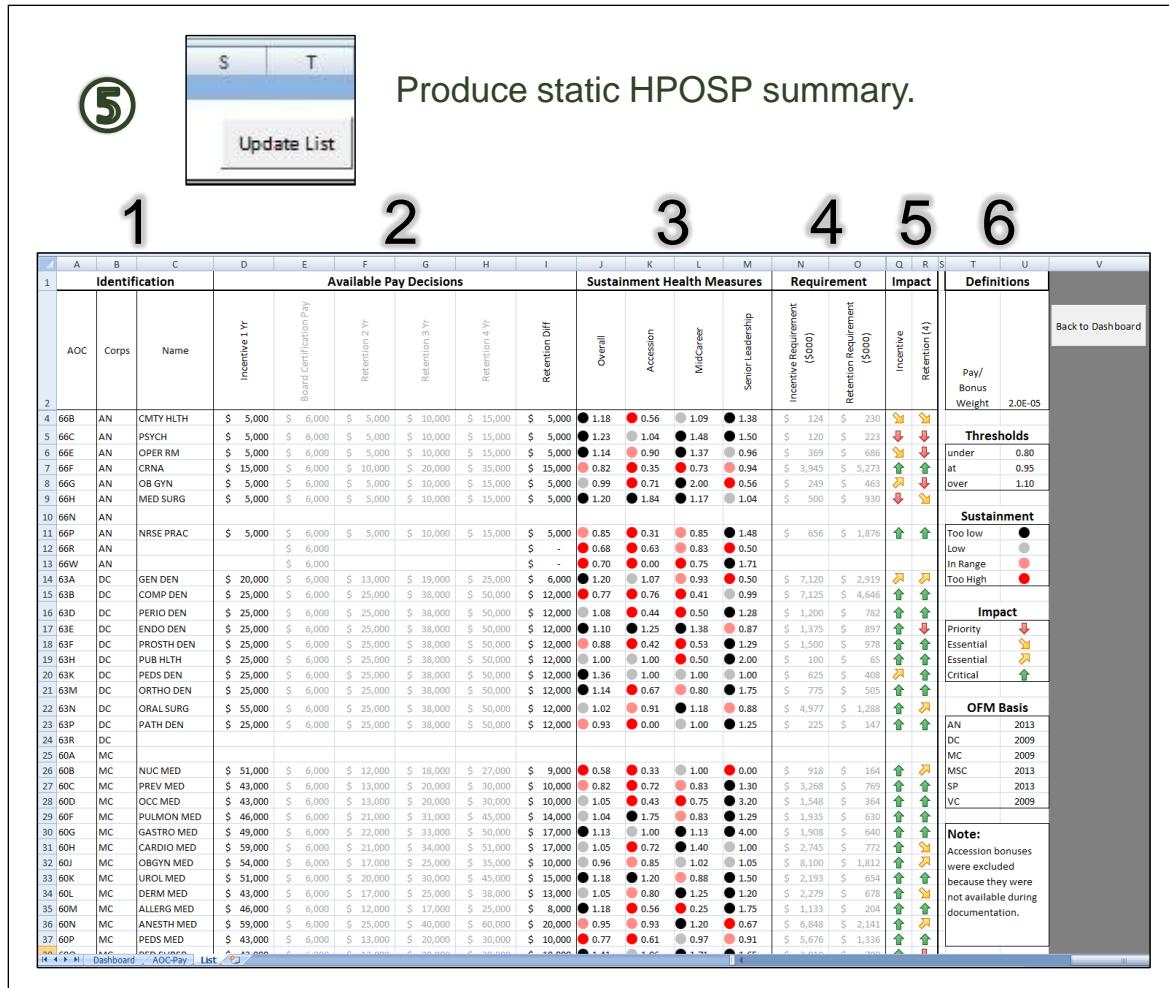


Figure 23. Function 5: HPOSP Output.

By clicking the “Update List” button at the upper right of the dashboard, the “List” worksheet updates the summary of AOC context for HPOSP. The worksheet has six types of columns (as shown in Figure 23):

- AOC Identification.** The AOC information prints from the “AOC-Pay” worksheet. Only AOCs included in the “AOC-Pay” worksheet print to the “List” worksheet, even if the OFM files from MODS contain AOCs not included in “AOC-Pay.” If “AOC-Pay” contains AOCs not populated in the OFM files, column types 3 and 5 remain blank.
- Available Pay Decisions.** Per capita HPOSP eligibility populates from “AOC-Pay” with the same constraints as column type 1.
- Sustainment Health Measures.** Sustainment health for each of the four career zones includes both the measurement and an icon (settings described in column type 6 “Definitions”).
- Special Pay Requirement.** The total requirement for incentive pay and retention bonuses populates from “AOC-Pay.” The workbook does not list accession bonuses because at time of documentation, by-AOC values were not available to the study team. The decision tool does not list board certification pay because it affects quality rather than sustainment.

**5. Impact Category.** Sustainment impact categorization provides the basis to resize the program by incorporating eligibility changes for HPOSP. The decision tool displays suggested impact categories for incentive pay and retention bonuses (other HPOSP is excluded for the same reasons as column type 4). The worksheet uses equations in these columns (in contrast to direct entry as in previous column types) to apply thresholds as in Equation 3 and Equation 4, but the section only displays categorization. The specific value is *not* important, and the suggested sustainment impact may be modified by additional context for reasons detailed in Section 6.4. Icon settings are described in column type 6 Definitions.

**6. Definitions.** Sustainment settings and context may be altered in the worksheet.

- Pay/Bonus Weight. This setting affects sustainment impact categorization (column type 5) as a proxy for influence and manageability of per capita pay on Soldier decisions. Because this rate varies between AOCs and cannot be exactly known (discussion in Section 6.4), the decision tool only *suggests* sustainment impact force management, and experts must authoritatively identify sustainment impact.
- Thresholds. The sustainment health measures (column type 3) and impact category (column type 5) use four icons by comparing values to these thresholds as depicted in Table 14: below a low number (0.8), near middle (0.95), and high (1.10). These settings are based upon consideration of sustainment health measures as applied by the U.S. Air Force (Section 4.4). Thresholds bias towards slight undermanning, which the inventory accommodates as reduced transition time or gaps between position replacements.

| Threshold                 | 0.80          | 0.95           | 1.10           |               |
|---------------------------|---------------|----------------|----------------|---------------|
| Sustainment column type 3 | ●<br>Too Low  | ●<br>Low       | ●<br>In Range  | ●<br>Too High |
| Impact column type 5      | ↑<br>Critical | ↔<br>Essential | ↔<br>Essential | ↓<br>Priority |

**Table 14. Icon Thresholds for Decision Tool List.**

- OFM Basis. These year groups correspond to the most recent listed years for each AOC imported from the OFM spreadsheets (control ③). These fields update with the rest of the worksheet. Because some corps receive creditable time, their OFM basis year may be up to 6 years prior to current year.
- Note. Because accession bonuses influence production sustainment health sustainment impact could be calculated for accession bonuses. However, the study team did not have access to a by-AOC listing of accession bonuses while developing the decision tool.

The “List” worksheet must maintain consistent format. When the user activates “Update List,” the decision tool writes values into predetermined locations for column types 1 through 4. Column type 5 applies a formula (which the user should not change) from settings defined in predetermined locations in Column 6. Only titles or definitions within the decision tool may be changed *within the cells as written*.

OTSG provided feedback to apply the decision tool to support requirements development beginning in December 2013. OTSG limited study team efforts to refine the user interface for the workbook because their desired follow-on effort is to incorporate the capability into MODS,

the data source for the decision tool. APPENDIX E provides discussion that may inform capability development within MODS.

## 7 REVIEW OF STUDY OBJECTIVES

### 7.1 The “As-Is” PPBE Process for HPOSP

The PPBE process for HPOSP is depicted in Figure 3 and Figure 4. Prior to the study, an HPOSP process map did not exist. The study team iteratively described the HPOSP PPBE process by updating a trace-event description during meetings with stakeholders and confirmed the final document flow in emails exchanged with primary stakeholders.

Stakeholders understand their own roles without understanding other stakeholders’ roles. Two aspects of the PPBE process cannot be addressed by the Army alone and significantly shape the PPBE process. First, the Army cannot modify the *unchangeable* HPOSP rates published by DoDI. Choosing whether or not to cut a Soldier’s annual pay by \$60,000 is not much of a choice. Secondly, disbursement systems cannot be updated as DFAS transitions between data systems. Entering thousands of payments manually is far harder than automatic disbursement.

### 7.2 Sources of PPBE Conflict for HPOSP

The analysis used to size the HPOSP program does not define how HPOSP funds are spent. Programming concludes without stakeholder consensus. During HPOSP requirements development, each stakeholder represents different quantitative priorities, and each applies different analysis for the purpose of HPOSP. During the programming process, the requirement becomes more dissociated from HPOSP policy and purpose until resulting in a budget misaligned with the plans for execution. Section 4.1 distinguishes desirable conflict from inaccuracies and inefficiencies during planning, programming, and budgeting.

The DFAS data system has entered planned obsolescence, creating opportunities for both error and accounting challenges. Each month, finance officers manually enter hundreds of payments against meaningless or misleading codes. Errors occur. Because payments may lag the planned payment date by up to 3 months, errors are hard to distinguish from delay. Measuring by different methods often results in different numbers, and each stakeholder uses different measurements. The DFAS system doesn’t provide a report to deconflict payments, and errors are hard to identify. Over one-third of HPOSP is planned for the final 3 months of the fiscal year (and may be disbursed after the close of the fiscal year, due to the 3-month lag), by which time payment lag and error correction have become completely indistinguishable. Section 5.1 describes conflicts arising as disbursement errors compound through the year.

### 7.3 Recommendations for Process Improvement

**Recommendation 1:** Incorporate measurable force sustainment risk into HPOSP planning and programming. If HPOSP exists to ensure the Army has adequate supply of HPOs, program sizing should measure sustainable HPO adequacy. Because the HPOSP program can only be resized by changing eligibility criteria, program cuts must trigger changes to Army policy to correspond to reduced spending.

At OTSG’s direction, CAA developed a decision tool to support recommendation 1. Section 4.5 provided an overview of process implementation and stakeholder improvement. Chapter 6

discussed the decision tool concept and implementation. OTSG is exploring a change to MODS to incorporate capability demonstrated by the resulting workbook.

**Recommendation 2.1 (not implemented):** OTSG and G-1 draft policy change to establish an intentional lag between contract signature and bonus execution. Faced with a potentially unpredictable and expensive problem, the Army should prepare by reducing the uncertainty of contract signatures. By DoDI, one-third of the HPOSP budget is obligated for the final quarter of the fiscal year. With more forewarning between contract signature and disbursement, the size of the Army obligation has more certainty.

**Recommendation 2.2 (not implemented):** OTSG sponsors develop an automated tool to resolve discrepancies by name between FID and PE amounts. People traditionally determine their account balance by reconciling payments. Error must be accepted as a given: DFAS finance officers disburse HPOSP by manually entering data for thousands of payments. Payment cannot be automatic, but software could reconcile the OTSG-provided list of payments against a list of completed payments to identify discrepancies in recipients, amounts, and pay types.

Section 5.4 discusses improvements and approaches to implement recommendation 2. OTSG had already requested early contract signatures and indicated intent to formalize the process through a policy change. Stakeholders expressed interest in an HPOSP disbursement reconciliation tool but could not gain the necessary DFAS feedback data.

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## **APPENDIX A PROJECT CONTRIBUTORS**

### **A-1 PROJECT TEAM**

Project Directors:

Ms. Nancy Zoller (Initial)

Ms. Lisa Hamp (Interim)

Ms. Valentin Swegle (Final)

Team Member:

Mr. Abram Gross

### **A-2 PRODUCT REVIEWERS**

Mr. Russell Pritchard, Quality Assurance

### **A-3 EXTERNAL CONTRIBUTORS**

HPOSP PPBE Process and Conflicts

DASG-HR-P: Mr. Craig Buss, Mr. Harold Christopher

G-1: LTC Stephen Gauthier

G-8 PA&E: LTC Michael Kolb

ASA(FM&C), MPA: Mr. Michael Fulton, Ms. Valerie Alexander, Ms. Althea Duncan

DFAS: Ms. Linda Waln

Sustainment Impact

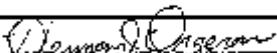
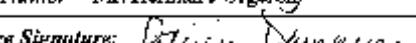
DASG-HR-P: Mr. Craig Buss, Mr. Harold Christopher

USAF/A1PF: Lt Col Patrick White, Maj Mark Degenhardt

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## APPENDIX B REQUEST FOR ANALYTICAL SUPPORT

### REQUEST FOR ANALYTICAL SUPPORT

|  |  |                                     |
|--|--|-------------------------------------|
| <b>Performing Division:</b> RA   | <b>Account Number:</b> 2013074   | <b>FY:</b> 2013                     |
| <b>Acronym:</b> HPOSPOS  | <b>Start Date:</b> 30-Jan-13   | <b>Est Compl Date:</b> 30-Sep-13    |
| <b>Title:</b> Health Professions Officer Special Pay Study   |  |                                     |
| <b>Category:</b> Army Program Resource Analysis  |  | <b>Method:</b> In-house             |
| <b>Sponsor (i.e., DCS-G3) Name:</b> OTSG   | <b>Office Symbol:</b> DASG-HR-P  |                                     |
| <b>Phone:</b> (703) 681-1013   | <b>E-Mail:</b> craig.buss@us.army.mil  | <b>POC:</b> Mr. Craig Buss          |
| <b>Resource Estimates:</b>   | <b>a. Estimated FSM:</b> 8   | <b>b. Estimated Funds:</b>          |
| <b>Models to be Used:</b>  |  | <b>Product:</b> Briefing and Report |
| <b>Description/Abstract:</b><br>The Special Pay Branch office of the Office of the Surgeon General (OTSG), which is in charge of special pays for Health Professions Officers (HPOs), has asked for CAA's help in analyzing their current Special Pay Program. CAA will perform a third-party review of the current system and identify any areas of the system that can be improved upon to create a more efficient way to plan, program, budget, and execute the HPO special pays.   |  |                                     |
| <b>Study Director/POC Signature:</b>    |  | <b>Phone:</b> 703-306-5446          |
| <b>Study Director/POC:</b> Ms. Nancy M Zoller  |  |                                     |
| <b>PART 2</b>  |  |                                     |
| <b>Background/Statement of Problem:</b><br>HPOs receive the same basic pay that all Officers of a similar rank and years of service receive; however, in order to compensate for their highly technical and marketable skills, they also receive a host of special pays. The Special Pay program manages these special pays. With the current environment of downsizing in the Army, a systems review is needed to ensure that the special pay is programmed, managed, and executed within the allotted budget in order to meet mission demands. |  |                                     |
| <b>Scope:</b><br>CAA will review the current special pays system and assess the validity of the current system, as well as identify any potential problems. CAA will also provide recommendations on ways to fix any problems or make the current system more efficient in order to provide an efficient method of planning, programming, budgeting, and executing the HPO special pay.  |  |                                     |
| <b>Issues:</b><br>There may be issues in getting data, specifically from DFAS - the Special Pay Branch has had issues in the past getting data from DFAS.  |  |                                     |
| <b>Milestones:</b><br>Interim IPRs: April 2013, May 2013, June 2013<br>Final Briefing: July 2013<br>Report: September 2013   |  |                                     |
| <b>Signature</b>   | <b>CAA Division Chief Signature:</b>   | <b>Date:</b> 31 JAN 2013            |
|  | <b>CAA Division Chief Name:</b> Mr. Herman J. Ogeron   |                                     |
|  | <b>Sponsor Concurrence Signature:</b>  | <b>Date:</b> 25 Feb 13              |
|  | <b>Sponsor Name (COL/DA Div Chief/GO/SES):</b> PATRICIA DARNAUER, COL, M.S. Director                                       |                                     |

Print Date: 30-Jan-13

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## APPENDIX C SUMMARY OF STAKEHOLDER CONTACT

### C-1 Initial Stakeholder Interviews

Interview notes reflect CAA study team thoughts and stakeholder perceptions prior to the Planning, Programming, Budgeting, and Execution (PPBE) process mapping. At the time of the interviews, both the study team and stakeholders had incomplete perceptions of the Health Professions Officer (HPO) Special Pay (HPOSP) PPBE process.

#### **G-1, Manning Program Evaluation Group (MMPEG), Military Personnel (MILPERS) (20130510)**

##### Problem Description of HPOSP PPBE System

1. The biggest issue is current year execution and the challenge is the Office of the Surgeon General's (OTSG's) lack of visibility of Defense Finance Accounting Service (DFAS) execution. (referenced by G-1, although G-1 is not involved in current year of execution)
2. G-1 sometimes produces a Critical Requirement different from the Requested Requirement due to disagreement on derivation of projected eligible personnel, strategic premise of the Special Pay eligibility, or historical trend of eligible personnel population.

##### Improvements In Progress

- For this current year's execution, the Army Budget Office (ABO) and OTSG are performing monthly checks.
- The Secretary of the Army has authority over all special pays starting in fiscal year 2015 (FY15).

##### Potential Improvements

- G-1, no suggestions
- CAA Suggestion for G-1, Item 2. Development of metrics for manning, sustainment, and retention by years of service. Because accession and retention decisions have long-term effects on career field health, particularly on retention of sufficient seniority for leadership and experience, planning and tracking of the career field against years-of-service objectives will enable calculation of eligible personnel against actual inventory development and identification of the opportunity of impact for inventory management tools for a sustainable population.

##### Specific Process Information from G-1 MMPEG's purview

- RBuilder, an MMPEG tool, develops the Command Requirement, the Validated Requirement, and the Critical Requirement. OTSG produces the Command Requirement. G-1 MMPEG produces the Validated Requirement. G-1 also produces the Critical Requirement; however, this requirement is voted on by the stakeholders (ABO, G-8 PA&E, ARNG, DAMO-CIR, DASA-CE, and OTSG).
- e-Probe is a system that G-8 owns. G-1 MMPEG has read-only access to this system.
- HPOSP is the largest portion of the very tiny discretionary portion of MMPEG.

#### **ABO, Military and Personnel Division (20130515)**

##### Problem Description

1. Because HPO Retention Bonus is paid as a lump sum after graduation, one-third of the HPO retention bonus is paid late in the Fiscal Year (July), which puts the Army at risk of an Anti-Deficiency Act Violation if coverage can't be found for execution above the spend plan. OTSG plans for July to be their peak month, however July 2012 was higher than expected. OTSG didn't

see he had a problem coming. These issues in HPOSP budget were brought to the forefront in August/September 2012.

2. Until around 2011 or 2012, special pay was considered discretionary spending and was not fully funded, although HPOSP is contractually obligated and non-payment of HPOSP would be an Anti-Deficiency Act violation. Until 2013, HPOSP budget has been previously low-balled and then executed highly.
3. The spend plan does not agree with monthly DFAS reporting because disbursement of funds as reported by ABO may lag planned contract execution date by up to 40 days. OTSG doesn't have visibility of execution and does not know which of the contracts have executed.
4. The planned obsolescence of the Resource Management Tool (RMT), the finance system of record, requires some types of special pay to be disbursed from consolidated or multi-purpose accounts; other types of special pay require a finance officer to manually enter each occurrence of each payment. RMT options misaligned with the process increase the likelihood in errors for selecting Activity Group from which to disburse funds. The human-in-the-loop processes at DFAS increase the likelihood for errors in amount disbursed. Additionally, consolidation of multiple types of special pay under shared Activity Groups compound the difficulty of identifying the cause of differences between the OTSG spend plan and budget execution.

#### Improvements In Progress

- For this current year's execution, ABO and OTSG are performing monthly checks of the spend plan versus budget execution, which increases joint oversight of funds spent and remaining against the budget.
- The DoD is transitioning from RMT in Dec 2016 to the General Fund Enterprise Business System (GFEBS) as the system of record, which will allow for automation of funds disbursement and creation of Activity Groups specific to the structure of special pay.

#### Potential Improvements

- Improvements to spend plan development (various)
- Improve what ABO sees in RMT execution and what OTSG sees in the Medical Operational Data System (MODS).

#### Specific Process Information from ABO's purview

- Spend plans are what OTSG **truly** believes HPOSP will spend by month. For OTSG, Mr. Buss builds the spend plan in Aug-Sep before the start of the coming fiscal year. This is truly what Mr. Buss believes HPOSP will spend by month; it is independent of the funded requirement in President's budget.
- RMT is the current tool DFAS uses for execution. There are no updates being performed to RMT because DFAS will be launching GFEBS starting FY14.
- DFAS Report 1002 is the Accounting Document of Record generated monthly.

#### G-8 PA&E (20130515)

##### Problem Description

1. Special pay rates are not being reviewed to determine whether the special pay supports inventory management prioritized to needs of the Army. For example, in a diminishing budget environment, if the population is overmanned in all grades, the original shortfall of recruiting or retention may no longer exist to require special pay.
2. Certain HPOs (e.g., social workers) are overpaid relative to their civilian counterparts. Special pay for medical personnel is intended to narrow the gap between military and civilian salaries for

medical professionals and provide a means to attract and retain them beyond initial obligation. Special pay sometimes exists where military pay exceeds civilian salaries.

3. Some HPOs are manned differently than programmed for the Army (e.g., overmanning physician assistants to compensate for a shortage of physicians). The validated critical requirement for special pay is intended to support the strategic HPO Manning objectives for the Army.
4. Special pay is received for all HPOSP in the career field, regardless of whether the HPO is a clinical provider in their current assignment. For example, HPO in command billets receive special pay although they are not providing direct clinical benefit for the profession for which they were accessed.

#### Improvements in Progress

- In 2015, all Army HPOSP will be subject to policy established by the Secretary of the Army.

#### Potential Improvements

- Change special pay policies between budgeting and execution to align the budget priorities with expenditures.
- Review special pay rates to use special pay as a tool to enhance recruiting and retention for career field management.
- Reconsider the special pay policies for HPOs in command positions.
- Consider disposition of HPO retention bonus on a monthly basis, rather than annual expenditures, in order to provide more regularity to expenditures.

#### Specific Process Information from G-8 PA&E's purview

- Discussion of area of concentration (AOC) specific eligibility is resolved by discussing needs of the Army during the development of the Validated Critical Requirement.

#### DFAS, Accounting (20130521)

##### Problem Description

1. Pay disbursement lags the obligated date due to manual entry.
2. Shared Format Identifier codes result in incorrect account entry. This problem has become increasingly common over the last several years. One-time errors can be reclassified in Accounting, but some personnel need to be retrained when incorrect account numbers are consistently applied.

#### Improvements in Progress

- Accounting errors had been more frequent prior to 2013 but are not currently significant.

#### Specific Process Information from DFAS's purview

- Finance Officers enter HPOSP into payroll from a certified list received each month.
- Analysis of disbursed HPOSP occurs at ABO's request when the published 1002 Appropriation Status differs from the Format Identifiers (FIDs) in the spend plan. For example, some legal special payments have incorrectly been made from HPOSP FIDs.
- Resolution of incorrect HPOSP for individuals occurs when a Soldier self-identifies incorrect payments (e.g., contractual payment not received) or when FID analysis identifies an error (e.g., a \$20,000 payment incorrectly entered as a \$2,000,000 payment, which is an actual example).
- Payments incorrectly made from HPOSP accounts will be returned to HPOSP accounts after the correction process, which may take months.

## **C-2 E-Mail to Verify Stakeholder Perspective**

The study team developed the HPOSP PPBE process map through stakeholder discussions. Initial meetings provided a foundation of stakeholder perspective. Subsequent meetings refined the process flow. In follow-up emails to all stakeholders, the study team verified the team's notes on stakeholder perspective: conflicts, stakeholders, process flow (as seen in Figure 3 and Figure 4), completeness of the research, and meeting notes. Corrections were minor and were immediately incorporated.

-----Original Message-----

From: Hamp, Lisa M CIV (US)  
Sent: Monday, June 17, 2013 5:10 PM  
To: Kolb, Michael K LTC USARMY (US)  
Cc: Swegle, Valentin M CIV (US)  
Subject: Review/Summary of G-8 Discussion (Regarding PPBE Process for HPO Special Pay) (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

LTC Kolb,

Hope all is well. Ms. Swegle and I are requesting your review on the attached slides. As you are aware, we are reviewing the PPBE process for HPO Special Pay. We met with various stakeholders to understand the process conflicts.

Slide 1: Describes what G-8 believes the issues are within the HPO Special Pay PPBE Process. CAA mapped these conflicts from our discussion with you to common conflict areas we heard throughout our stakeholder discussions.

Slide 2: Shows the organizations involved in the PPBE process and the extent of their involvement.

Slide 3-4: HPO Special Pay PPBE Process Maps

Slide 5: A list of organizations and references for our literature review (For your SA)

Slide 6: Summary of our notes from our discussion

Requesting:

- 1) Confirmation that our description of G-8 concerns can be mapped to a common conflict area (slide 1)
- 2) If anything else is incorrect, requesting feedback on slides 2-6.

Please let me know if you have any questions. Thank you.

V/r,  
Lisa

Lisa Hamp (formerly Kaiser)  
Operations Research Analyst  
Center for Army Analysis  
703-806-5573  
lisa.m.hamp.civ@mail.mil

**Figure C-1. Example Email to Verify Sponsor Perspective.**

Study conclusions reflect the verified perspectives of OTSG, G-1, G-8, and ABO.

## C-3 Interim Update to Sponsor

26 June 2013

### **(U) CAA Interim Update on Health Professions Officer Special Pay (HPOSPS) (U) (CSCA-RA)**

CAA's OTSG study team (Ms. Hamp, Ms. Swegle, LTC Foster-Daniels) and OTSG's Special Pay Branch (Mr. Craig Buss) conducted a 2-hour HPOSPS review on Wednesday, 26 June 2013. Meeting was convened at OTSG's request to inform July 2013 budget decisions. HPOSPS objective is to reduce budget execution conflict among HPOSP stakeholders.

CAA HPOSPS study directors, Ms. Hamp and Ms. Swegle, briefed progress against the study's methodology: process flow maps, process conflicts and issues, and initial recommendations. OTSG was pleased with the briefing and thought conclusions were spot-on. CAA sought OTSG interest in initial recommendations:

- 1) Develop proposal to incorporate measurable force sustainment and risk into HPOSP programming and budget processes.
- 2) Draft policy change to establish an intentional lag between contract signature and bonus execution.
- 3) Develop an automated tool to resolve error discrepancies in funds disbursement.

To implement recommendations, Mr. Buss defers to G-1 and requests CAA brief the interim update (process flow maps, process conflicts and issues, and initial recommendations) to the G-1 MMPEG point of contact and ABO MILPERS Chief. Mr. Buss plans to use CAA's recommendation #2 to support his argument for a policy change to reduce funds executed in July. Mr. Buss anticipates difficulty in implementing recommendation #3 due to obstacles to obtain data from DFAS, but encourages CAA study team to gauge interest from G-1 and ABO and drive on.

CAA asked whether the project's suspense of 30 September 2013 was a hard stop, and Mr. Buss responded that the CAA study team could pursue tool development and project completion beyond 31 September. CAA let Mr. Buss know that Ms. Swegle will be the new study director and LTC Foster-Daniels will join the team.

Prepared By: Ms. Hamp

18 July 2013

### **(U) CAA Interim Update on Health Professions Officer Special Pay (HPOSPS) (U) (CSCA-RA)**

CAA's OTSG study lead (Ms. Swegle), OTSG's Special Pay Branch Chief (Mr. Craig Buss), G-1's MILPERS Division (Mr. Dave Jacobini and LTC Stephen Gauthier), and ABO's Military Personnel Branch (Ms. Valerie Alexander and Ms. Althea Duncan) conducted a 1-hour HPOSPS review on Thursday, 18 Jul 2013. Meeting was convened at HPOSPS's and OTSG's request to determine way ahead for the project.

Ms. Swegle briefed progress against the study's methodology: process flow maps, process conflicts and issues, and initial recommendations. Attendees concurred and suggested few changes. CAA sought interest in initial recommendations:

- 1) Develop proposal to incorporate measurable force sustainment and risk into HPOSP programming and budget processes.
- 2) Draft policy change to establish an intentional lag between contract signature and bonus execution.
- 3) Develop an automated tool to resolve error discrepancies in funds disbursement.

Mr. Buss has already begun implementing recommendations #1 and #2. During the meeting, Ms. Alexander independently suggested recommendation #3. In support of recommendation #3, Mr. Buss and Ms. Alexander will seek a monthly feedback spreadsheet from DFAS to compare contracts with funds obligations.

After the meeting had concluded, Ms. Swegle provided additional detail to Mr. Buss regarding recommendation #1: an automated tool can both measure the sustainment impact and suggest a prioritization for HPOSP (steps 1 and 2 in for recommendation #1). This tool would produce rich information but would also reduce detail to a manageable discussion, providing a shared analytic basis with explicit capability/risk tradeoffs for OTSG, G-1, and G-8.

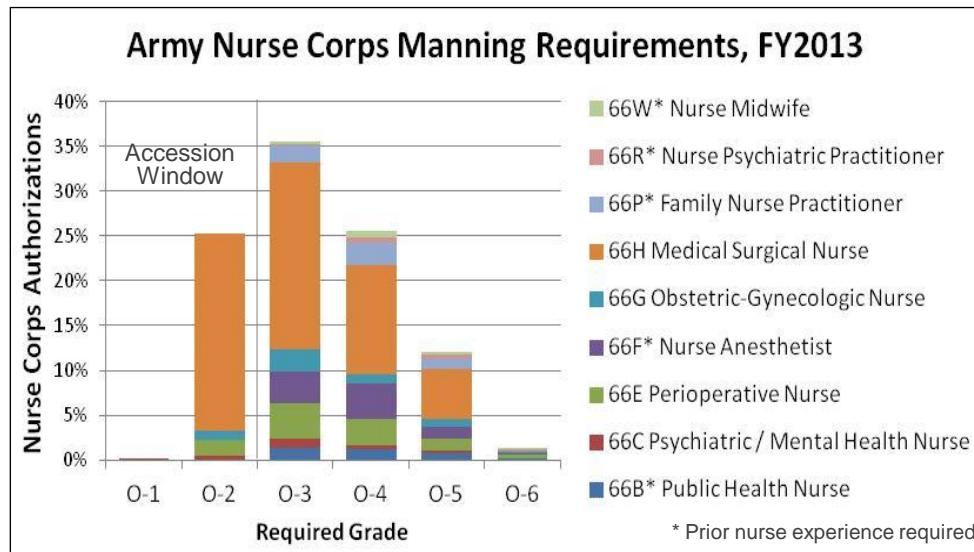
Prepared By: Ms. Swegle

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## APPENDIX D SPECIAL PAY AND SUSTAINMENT

### D-1 Force Sustainment as a 30-Year Plan

Historically, Army staff considered eligibility for Health Professions Officer (HPO) Special Pay (HPOSP) as a comparison of all assigned (the inventory) against all authorizations (manning requirements). Low-resolution planning created significant fluctuations in accessions, such as single-year spikes or chronically undermanned grade levels that had to work through the system. Planning by full-inventory comparisons did not take into account the effects on the future force. Inconsistency in force sustainment resulted in adverse effects to occupational specialties: training pipelines, future grade-level manning, promotion opportunity, and retention decisions. Inability to sustain HPO manning also negatively impacts the needs of the Military Health System: deployment requirements, certification for medical treatment facilities, funds to contract civilian augmentees and activate the Reserve Components. In planning only to meet short-term end strength goals for HPOs, the Army also jeopardizes the long-term ability to fulfill the mission of Army Medicine.



**Figure D-1. Nurse Corps Authorizations.**

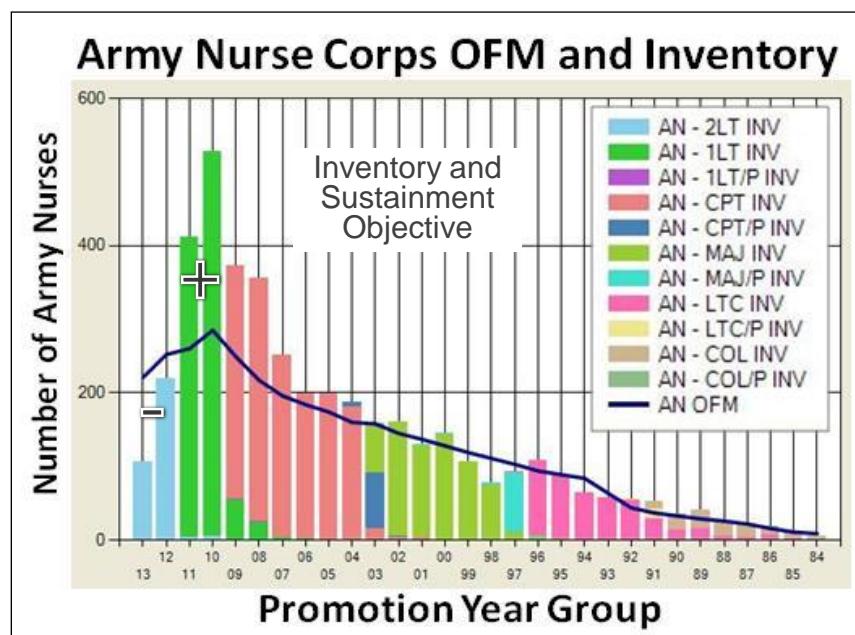
The Army commissions lieutenants and develops officers at successive grades. Some areas of concentration (AOCs) require transfer mid-career after years of career development in other AOCs. Deliberate force sustainment efforts are needed to successfully fill authorizations at the rank of major and above.

As depicted in Figure D-1, the Army requires nurses who have advanced in their careers beyond their initial accession as lieutenants (O-1 and O-2). Some AOCs will specialize as captains, such as “66F Nurse Anesthetist.” Higher grades require fewer Soldiers to perform more senior responsibilities.

### D-2 Objective Force Management

Beginning in 2013, budget reductions demand a long-term view to weigh difficult decisions with 30-year force sustainment impact. Reduction in special pay changes expected compensation:

hard lessons have shown that the transferable skills and limited supply of health professionals may move within the DoD or to the Department of Veterans Affairs, creating an inventory problem that may persist for decades. To better predict the requirement for force management programs on year groups, the DoD developed sustainment-based force management analysis, realized in Army Medicine as the *Objective Force Model* (OFM) lines for each AOC. The size (total Soldiers) of OFM is determined by duties fulfilled by Soldiers: authorizations from the current and future Army manning documents; historical rates (over 10 years) for Trainees, Transients, Holdees, and Students (TTHS); and the historical “tax” (over 10 years) of institutional and development requirements. The shape (30-year objective) of OFM defines year-group manning to remain sustainable from AOC accessions through expected retention, using 10 years of historical promotion, separation, retirement, and cross-flow data.



**Figure D-2. Nurse Corps Manning.**

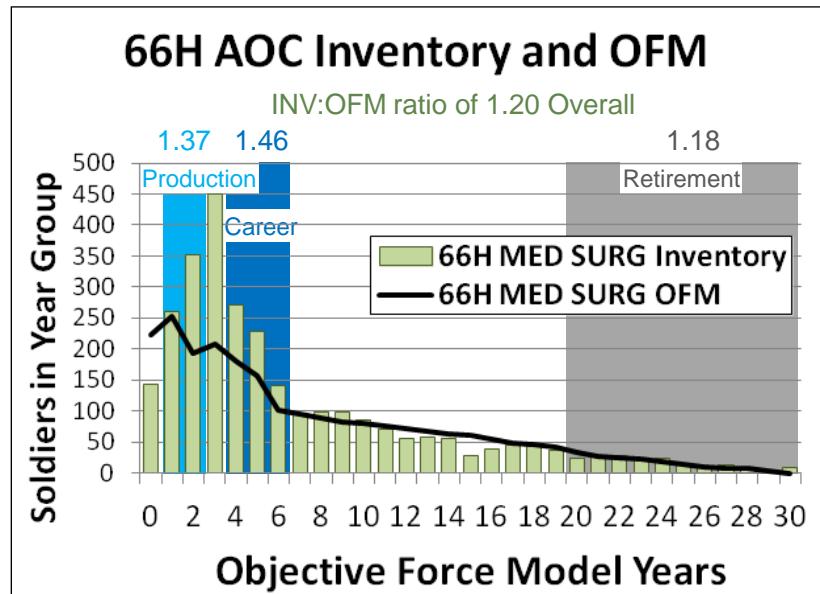
Although authorizations are developed by grade, Soldiers with varying years of commissioned service (different promotion year groups) serve at the same grade. In a sustainably manned AOC, the inventory meets the OFM line. Comparison of year-group inventory against OFM obviates long-term sustainment problems: overstrength (+) and understrength (-).

As depicted in Figure D-1, the inventory for each year group sometimes differs from the objective manning for sustainment. Prior to year group 07, the Nurse Corps was manned closely to the objective for sustainment. Accessions beyond demand resulted in Nurse Corps overmanning for year groups 11 through 07. Although year group 13 appears to be undermanned in the figure, the year group was still accessing new Soldiers during the data snapshot.

### D-3 Measurement of Sustainment Health

OFM enables objective comparison of force sustainability across year groups within an AOC or even across different AOCs. By accounting for the 30-year AOC profile, Army Medicine plans for healthy inflow (accessions), crossflow (AOC changes), and outflow (separations and retirements) to meet the needs of the Army (authorizations, TTHS, and institutional

development). The Army synchronizes inventory with OFM by tailoring policies, authorizations, mission sets, and opportunities available to Soldiers. Besides the overall alignment of inventory and OFM, Army Medicine considers a few critical zones of interest: initial qualification (accessions reach AOC proficiency), career commitment (development of career Soldiers), and retirement zone (over 20 years of commissioned service). Uniquely defined for each AOC, critical career zones identify year groups most susceptible to Force Management actions such as accession and retention policies and incentives.



**Figure D-3. Medical Surgical Nurse (66H) Manning.**

OFM establishes the desirable inventory level for efficient force sustainment. Inventory often varies from OFM: short-term responses create erratic fluctuations, and changes to medical support strategy produce overages and shortfalls that persist for decades. Measures taken at distinct inflections in OFM indicate both availability of the AOC to perform mission requirements and opportunities for Army Medicine to affect force sustainability.

|             |                          |
|-------------|--------------------------|
| Overall:    | Total capability         |
| Production: | Initial qualified supply |
| Career:     | Invested commitment      |
| Retirement: | Senior experience        |

As depicted in Figure D-3, the 66H AOC inventory measurably exceeds OFM overall (1.20) and within critical career zones: production (1.37), career (1.46), and retirement (1.18). Overmanning in production challenges an AOC's resources to develop capability. Overmanning during career decisions restricts Soldiers' opportunities for professional development and promotions. Benefits changes targeting the production and career zones may encourage attrition to return the AOC to healthy, sustainable, affordable levels. Because the retirement zone is also overmanned, AOC can accept some risk of secondary impact to the retirement-eligible population.

## D-4 Special Pay as Force Management

As Soldiers progress through 30-year careers, deliberate force management decisions affect the evolving shape of the inventory. Recruiting programs and overall benefits of Army service support inflow (initial accessions and HPO fully qualified accessions) to sustain the 30-year development of the force in the progression from new Soldiers to colonels. Compensation and mission demands strongly impact outflow (separation and retirement) decisions. The critical times for retention are at the conclusion of the first active duty service obligation (between 4 and 12 years of commissioned service for HPOs, when Soldiers decide whether to make the Army a career), and retirement eligibility. However the consistent marketability of HPO skill sets make departure decision less structured than other forces.

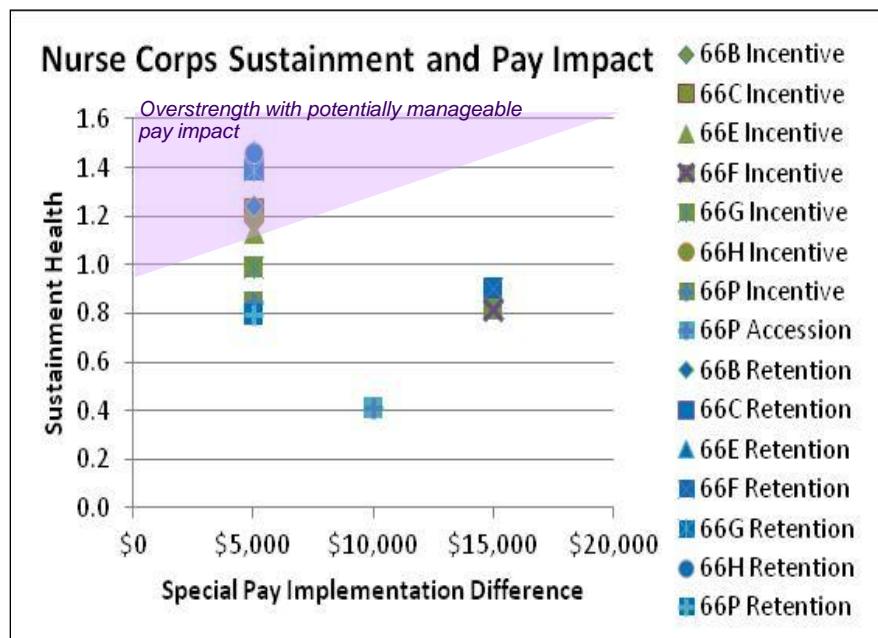
| HPO Special Pay   | Sustainment Effect                 |
|---|------------------------------------|
| <b>Incentive Pay:</b> Additional pay for designated specialties; professional skill recognition.  | Increase inflow and reduce outflow |
| <b>Accession Bonus:</b> One-time bonus for an initial active duty Service Obligation (ADSO).  | Increase inflow                    |
| <b>Retention Bonus:</b> Multi-year contractual pay for additional active duty service obligation (Must-pay obligation extends several years).                         | Reduce outflow                     |
| <b>Board Certification Pay:</b> additional pay for professional certification from a board recognized by Assistant Secretary of Defense for Health Affairs (ASD(HA)). | Increase professional competence   |

**Table D-1. HPOSP Definition and Force Sustainment Effect.**

As depicted in Table D-1, special pay influences the inventory. Special pay creates an opportunity to increase the relative attractiveness of an Army versus civilian career (incentive), enhance recruiting (accessions), influence separation decisions (retention), and encourage quality (board certification). The realized value of special pay as a force management tool is in the effects on aligning the inventory against OFM across and within targeted year groups.

## D-5 Impact of Special Pay Implementation

The ASD(HA) establishes rates for HPO special pay to provide comparable compensation across the Army, Navy, Air Force, Coast Guard, and U.S. Public Health Service. Each Service has limited control over the implementation of HPO special pay: Services may offer or not offer special pay only at the unmodified DoD rate. To encourage predictability in the AOCs, longer retention bonus contracts have higher annual value than shorter contracts: eligibility may be restricted to 3-year contracts, rather than 4-year contracts. Per capita pay changes affect AOCs differently: the demand for transferable skills of HPOs varies beyond the Army, as do compensation levels. Special pay influences AOC management by influencing the decisions of Soldiers.



**Figure D-4. Example Incentive, Accession, and Retention HPOSP Decisions.**

The priority of special pay can be initially categorized by both the sustainment health measure and per capita special pay amount.

Overall: Incentive pay

Production: Accession bonus

Career: Retention bonus

To support long-term force management, the Army may consider reduction of special pay in overstrength AOCs with relatively small special pay implementation differences. Rather than considering all HPOSP independently or by creating an absolute ranking of the HPOSP request, combining the sustainment health and the HPOSP implementation difference can subset the HPOSP discussion to HPOSP reductions which may have the most desirable and manageable effects. Ultimately, the expertise of Army Medicine and the needs of the Army must guide special pay implementation decisions.

As depicted in Figure D-4, the HPOSP for the Nurse Corps varies by value. That is, the necessity of the pay for AOC inflow (sustainment health) and the manageable influence on Soldier decisions (special pay implementation difference) varies across the HPOSP offered to the Nurse Corps. HPOSP influences AOC sustainment. AOCs with low sustainment health would likely become more unhealthy if HPOSP is lost. (Increased HPOSP amounts may increase sustainment health, although the Army must work within the Health Professions Working Group to change the pay amounts in the Department of Defense Instruction.) A high difference in annual per capita pay (e.g., a permanent pay cut of \$15,000), may introduce potentially unmanageable risk to AOC sustainment. The purple region depicted in the chart identifies an initial region to consider HPOSP reductions to manageably return the AOC to sustainable health.

## **D-6 Special Pay Impact**

Years of deliberate force sustainment efforts are needed to successfully fill authorizations at the rank of major and above. Comparison of year-group inventory against OFM obviates long-term sustainment problems: overstrength (+) and understrength (-). Sustainment health measures taken at distinct inflections in OFM indicate both availability of the AOC to perform mission requirements and opportunities for Army Medicine to affect force sustainability. The realized value of special pay as a force management tool is in the alignment of the inventory against OFM across and within targeted year groups. To support long-term force management, the Army may consider reduction of special pay in overstrength AOCs with relatively small special pay implementation differences (manageable effect on Soldier decisions). Ultimately, the expertise of Army Medicine and the needs of the Army must guide special pay implementation decisions.

## APPENDIX E HPOSP PRIORITIZATION CALCULATIONS

### E-1 Data and Calculations

The Medical Operational Data System (MODS) contains all data used in the decision tool.

- Inventory: The number of Soldiers in each area of concentration (AOC), summarized by each year group over a 30-year career.
- Objective Force Model (OFM): The target number of Soldiers for each year group of each AOC.
- Health Professions Officer Special Pay (HPOSP) eligibility: The annual amount which would be received by a Soldier in a particular AOC receiving a particular type of HPOSP.
- Signed HPOSP Contracts: Funds already obligated by the Army.

The decision tool includes some constant values.

- Pay/Bonus Weight: The rise in sustainment health uncertainty over an increase in HPOSP eligibility. In the decision tool, the rate is 0.2 per \$10,000.
- Thresholds: Force management considerations change at 0.8, 0.95, and 1.1.

The decision tool suggests and stores career zone definitions.

- Overall: All (years 0 to 30, inclusive).
- **Production (default and user-selected)**: This OFM peak value is bounded by years 4 and 15, inclusive. The default value is at the maximum 3-year lagging moving average; users should be able to reset to default values. Production includes the previous 2 years.
- **Career Decision (default and user-selected)**: The end of the largest OFM decrease is bounded by years 8 and 19, inclusive. The default value is at the greatest 5-year lagging difference; users should be able to reset to default values. A 1-year gap exists between production and career decision.
- Retirement-Eligible: Years 20 to 30, inclusive.

Some of the display values in the decision tool result from calculations.

- Sustainment Health: Alignment of inventory and OFM values within a career zone.

$$Health = \frac{\sum_{\text{zoneyears}} \text{inventory}}{\sum_{\text{zoneyears}} \text{OFM}}$$

The total inventory in the career zone is divided by the total OFM for the same career zone.

- Sustainment Impact Categorization: Sustainment health and HPOSP eligibility.

$$\text{essential: } 0.8 < Health + 0.2 \cdot \frac{\text{per\_capita}}{\$10,000} \leq 1.1$$

$$\text{critical: } Health + 0.2 \cdot \frac{\text{per\_capita}}{\$10,000} \leq 0.8$$

The categorization applies the thresholds and pay/bonus weight when measuring HPOSP for associated career zones: incentive pay and overall; accession bonus and production; retention bonus and career decision.

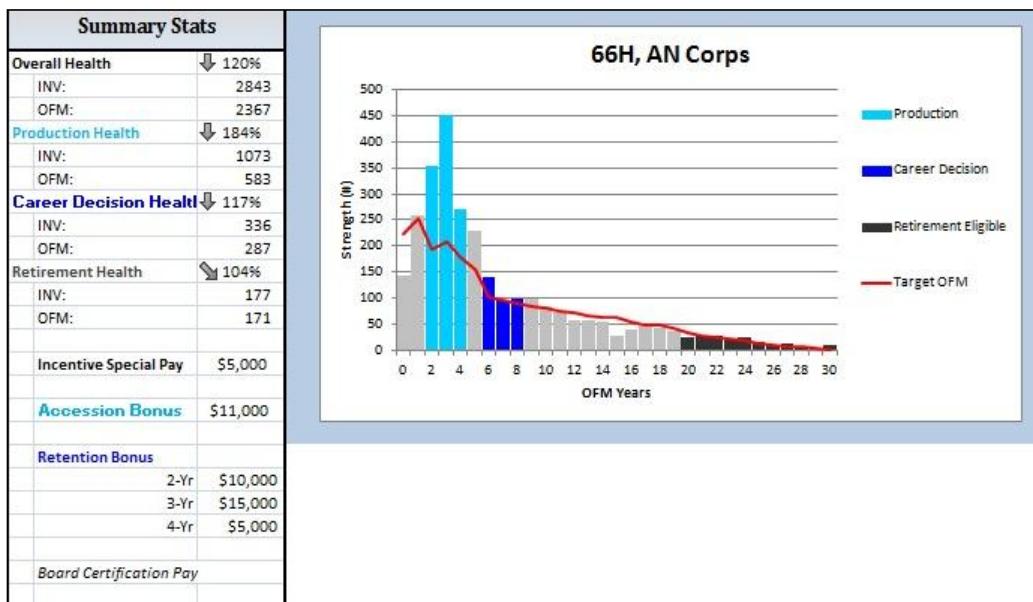
## E-2 Functionality

The decision tool informs decisions about each AOC and the HPOSP program.

Basic functionality must include two interfaces:

- AOC: Career zone settings (interactive), 30-year sustainment chart, career zone sustainment health measures, and available HPOSP decisions.
- All HPOSP: By-AOC pay decisions, sustainment health, total HPOSP cost, and suggested sustainment impact category.

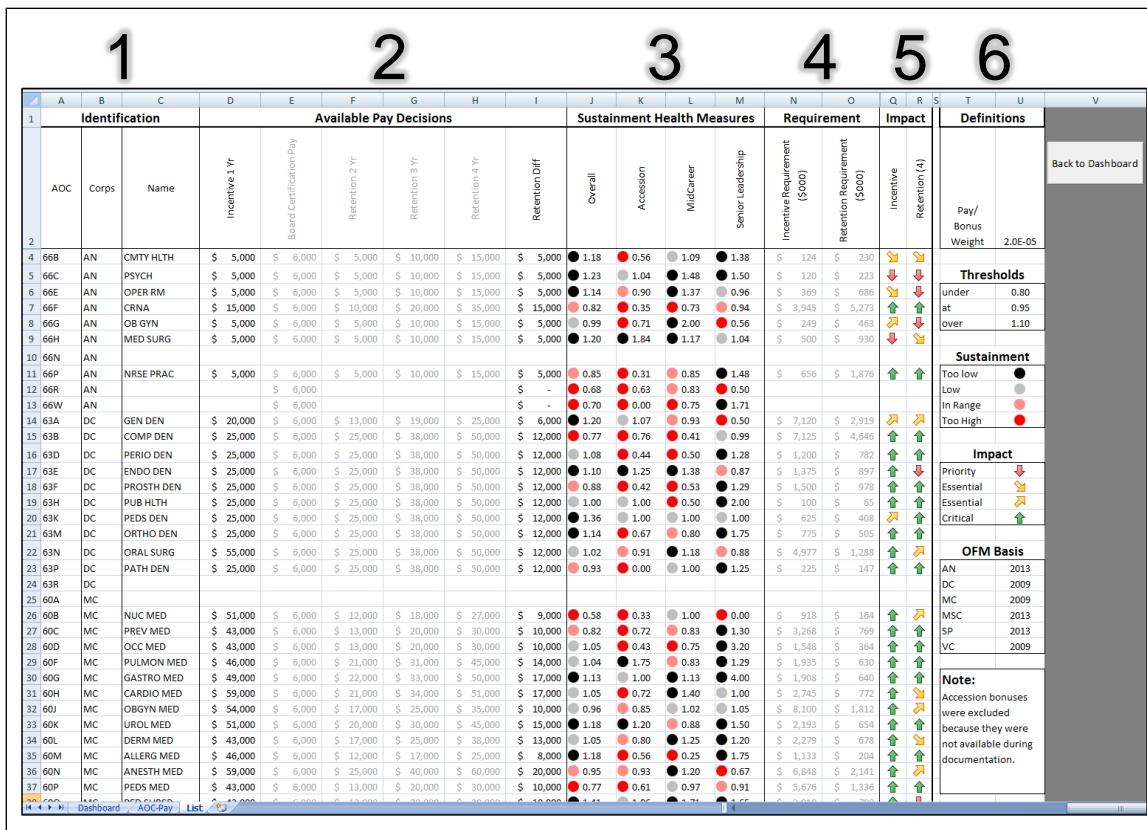
To understand the need for HPOSP, users view pertinent information about each AOC.



**Figure E-1. AOC Display.**

As seen in Figure E-1, the decision tool displays HPOSP context for each AOC: sustainment health measurements, available per capita HPOSP, and a sustainment chart of the inventory and OFM. When viewing the sustainment chart, the user can define two critical career zones: **Production** and **Career Decision**. This AOC view provides a consistent template to discuss the potential impact of HPOSP as a sustainment tool for an AOC.

To balance limited HPOSP funds across the Army, users view a list of all AOCs.



**Figure E-2.** HPOSP List.

The HPOSP list depicted in Figure E-2 includes information that can be used to prioritize the special pay requirement:

- 1. AOC Identification.** Each AOC.
- 2. Available Pay Decisions.** Per capita HPOSP eligibility.
- 3. Sustainment Health Measures.** Sustainment health for each of the four career zones includes both the measurement and an icon.
- 4. Special Pay Requirement.** Total contract value for incentive pay and retention bonuses. Accession bonuses and board certification pay may be listed but were not available to the development team when populating the decision tool.
- 5. Impact Category.** Sustainment impact categorization only displays icons. The specific number used to set thresholds is misleading.
- 6. Definitions.** Description of icon settings and constants.

To set the size of the HPOSP program, the user should be able to output an excel spreadsheet of the HPOSP list (sustainment impact should only include categorization, *not a calculation*) and support the prioritization discussion with images of the AOC display.

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